## Module 6

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## Lesson 2


coordinate plane
Lesson 2: Construct a coordinate system on a plane.

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## Lesson 3

a.

b.

coordinate grid

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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| - D |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  | ${ }^{\text {F }}$ | $F$ |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{\circ}{ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  | ${ }^{1}$ |  |  |  |  |

## unlabeled coordinate plane

## Lesson 4


b.

coordinate grid

## Lesson 5

| Point | $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: | :---: |
| $\boldsymbol{H}$ |  |  |  |
| $\boldsymbol{I}$ |  |  |  |
| $\boldsymbol{J}$ |  |  |  |
| $\boldsymbol{K}$ |  |  |  |
| $\boldsymbol{L}$ |  |  |  |


b.


| Point | $\boldsymbol{x}$ | $\boldsymbol{y}$ | $(x, y)$ |
| :---: | :---: | :---: | :---: |
| $\boldsymbol{D}$ | $2 \frac{1}{2}$ | 0 | $\left(2 \frac{1}{2}, 0\right)$ |
| $\boldsymbol{E}$ | $2 \frac{1}{2}$ | 2 | $\left(2 \frac{1}{2}, 2\right)$ |
| $\boldsymbol{F}$ | $2 \frac{1}{2}$ | 4 | $\left(2 \frac{1}{2}, 4\right)$ |

coordinate plane practice

## Lesson 6

| $1,000,000$ | 100,000 | 10,000 | 1,000 | 100 | 10 | 1 | $\cdot$ | $\frac{1}{10}$ | $\frac{1}{100}$ | $\frac{1}{1000}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Millions | Hundred <br> Thousands | Ten <br> Thousands | Thousands | Hundreds | Tens | Ones | $\cdot$ | Tenths | Hundredths | Thousandths |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

millions through thousandths place value chart


| Point | $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: | :---: |
| $\boldsymbol{A}$ |  |  |  |
| $\boldsymbol{B}$ |  |  |  |
| $\boldsymbol{C}$ |  |  |  |


| Point | $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: | :---: |
| $D$ |  |  |  |
| $E$ |  |  |  |
| $F$ |  |  |  |

## coordinate plane

## Lesson 7

a.

b.

coordinate grid within the coordinate pairs.
$\qquad$
$\qquad$
1.
a.

| Point | $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: | :---: |
| $A$ | 0 | 0 | $(0,0)$ |
| $B$ | 1 | 1 | $(1,1)$ |
| $C$ | 2 | 2 | $(2,2)$ |
| $D$ | 3 | 3 | $(3,3)$ |

b.

| Point | $\boldsymbol{x}$ | $\boldsymbol{y}$ | $(x, y)$ |
| :---: | :---: | :---: | :---: |
| $G$ | 0 | 3 | $(0,3)$ |
| $H$ | $\frac{1}{2}$ | $3 \frac{1}{2}$ | $\left(\frac{1}{2}, 3 \frac{1}{2}\right)$ |
| $I$ | 1 | 4 | $(1,4)$ |
| $J$ | $1 \frac{1}{2}$ | $4 \frac{1}{2}$ | $\left(1 \frac{1}{2}, 4 \frac{1}{2}\right)$ |


2.
a.

| Point | $(x, y)$ |
| :---: | :---: |
| $L$ | $(0,3)$ |
| $M$ | $(2,3)$ |
| $N$ | $(4,3)$ |

b.

| Point | $(x, y)$ |
| :---: | :---: |
| $O$ | $(0,0)$ |
| $P$ | $(1,2)$ |
| $Q$ | $(2,4)$ |

c.

| Point | $(\boldsymbol{x}, \boldsymbol{y})$ |
| :---: | :---: |
| $R$ | $\left(1, \frac{1}{2}\right)$ |
| $S$ | $\left(2,1 \frac{1}{2}\right)$ |
| $T$ | $\left(3,2 \frac{1}{2}\right)$ |

d.

| Point | $(x, y)$ |
| :---: | :---: |
| $U$ | $(1,3)$ |
| $V$ | $(2,6)$ |
| $W$ | $(3,9)$ |



## coordinate plane

## Lesson 8

$\qquad$

Multiply Decimals by 10, 100, and 1,000

| 1. | $62.3 \times 10=$ |  |
| :---: | :---: | :---: |
| 2. | $62.3 \times 100=$ |  |
| 3. | $62.3 \times 1,000=$ |  |
| 4. | $73.6 \times 10=$ |  |
| 5. | $73.6 \times 100=$ |  |
| 6. | $73.6 \times 1,000=$ |  |
| 7. | $0.6 \times 10=$ |  |
| 8. | $0.06 \times 10=$ |  |
| 9. | $0.006 \times 10=$ |  |
| 10. | $0.3 \times 10=$ |  |
| 11. | $0.3 \times 100=$ |  |
| 12. | $0.3 \times 1,000=$ |  |
| 13. | $0.02 \times 10=$ |  |
| 14. | $0.02 \times 100=$ |  |
| 15. | $0.02 \times 1,000=$ |  |
| 16. | $0.008 \times 10=$ |  |
| 17. | $0.008 \times 100=$ |  |
| 18. | $0.008 \times 1,000=$ |  |
| 19. | $0.32 \times 10=$ |  |
| 20. | $0.67 \times 10=$ |  |
| 21. | $0.91 \times 100=$ |  |
| 22. | $0.74 \times 100=$ |  |


| 23. | $4.1 \times 1,000=$ |  |
| :---: | :---: | :---: |
| 24. | $7.6 \times 1,000=$ |  |
| 25. | $0.01 \times 1,000=$ |  |
| 26. | $0.07 \times 1,000=$ |  |
| 27. | $0.072 \times 100=$ |  |
| 28. | $0.802 \times 10=$ |  |
| 29. | $0.019 \times 1,000=$ |  |
| 30. | $7.412 \times 1,000=$ |  |
| 31. | $6.8 \times 100=$ |  |
| 32. | $4.901 \times 10=$ |  |
| 33. | $16.07 \times 100=$ |  |
| 34. | $9.19 \times 10=$ |  |
| 35. | $18.2 \times 100=$ |  |
| 36. | $14.7 \times 1,000=$ |  |
| 37. | $2.021 \times 100=$ |  |
| 38. | $172.1 \times 10=$ |  |
| 39. | $3.2 \times 20=$ |  |
| 40. | $4.1 \times 20=$ |  |
| 41. | $3.2 \times 30=$ |  |
| 42. | $1.3 \times 30=$ |  |
| 43. | $3.12 \times 40=$ |  |
| 44. | $14.12 \times 40=$ |  |

Number Correct: $\qquad$
Improvement: $\qquad$
Multiply Decimals by 10, 100, and 1,000

| 1. | $46.1 \times 10=$ |  |
| :---: | :---: | :---: |
| 2. | $46.1 \times 100=$ |  |
| 3. | $46.1 \times 1,000=$ |  |
| 4. | $89.2 \times 10=$ |  |
| 5. | $89.2 \times 100=$ |  |
| 6. | $89.2 \times 1,000=$ |  |
| 7. | $0.3 \times 10=$ |  |
| 8. | $0.03 \times 10=$ |  |
| 9. | $0.003 \times 10=$ |  |
| 10. | $0.9 \times 10=$ |  |
| 11. | $0.9 \times 100=$ |  |
| 12. | $0.9 \times 1,000=$ |  |
| 13. | $0.04 \times 10=$ |  |
| 14. | $0.04 \times 100=$ |  |
| 15. | $0.04 \times 1,000=$ |  |
| 16. | $0.007 \times 10=$ |  |
| 17. | $0.007 \times 100=$ |  |
| 18. | $0.007 \times 1,000=$ |  |
| 19. | $0.45 \times 10=$ |  |
| 20. | $0.78 \times 10=$ |  |
| 21. | $0.28 \times 100=$ |  |
| 22. | $0.19 \times 100=$ |  |


| 23. | $5.2 \times 1,000=$ |  |
| :---: | :---: | :---: |
| 24. | $8.7 \times 1,000=$ |  |
| 25. | $0.01 \times 1,000=$ |  |
| 26. | $0.08 \times 1,000=$ |  |
| 27. | $0.083 \times 10=$ |  |
| 28. | $0.903 \times 10=$ |  |
| 29. | $0.017 \times 1,000=$ |  |
| 30. | $8.523 \times 1,000=$ |  |
| 31. | $7.9 \times 100=$ |  |
| 32. | $5.802 \times 10=$ |  |
| 33. | $27.08 \times 100=$ |  |
| 34. | $8.18 \times 10=$ |  |
| 35. | $29.3 \times 100=$ |  |
| 36. | $25.8 \times 1,000=$ |  |
| 37. | $3.032 \times 100=$ |  |
| 38. | $283.1 \times 10=$ |  |
| 39. | $2.1 \times 20=$ |  |
| 40. | $3.3 \times 20=$ |  |
| 41. | $3.1 \times 30=$ |  |
| 42. | $1.2 \times 30=$ |  |
| 43. | $2.11 \times 40=$ |  |
| 44. | $13.11 \times 40=$ |  |


coordinate grid insert


| Line $a$ :    <br> $x$ $y$ $(x, y)$  <br>     <br>     <br>     |
| :--- |


| Line $b:$ |  |  |  |
| :---: | :---: | :---: | :---: |
| $x$ | $y$ | $(x, y)$ |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| Line $c$ : |  |  |  |
| :---: | :---: | :---: | :---: |
| $x$ | $y$ | $(x, y)$ |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## coordinate plane

## Lesson 9

Line $\ell$
Rule: $y$ is 2 more than $x$

| $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: |
| 1 |  |  |
| 5 |  |  |
| 10 |  |  |
| 15 |  |  |

Line $m$
Rule: $y$ is 5 more than $x$

| $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: |
| 0 |  |  |
| 5 |  |  |
| 10 |  |  |
| 15 |  |  |


coordinate plane

Line $p$
Rule: $y$ is $x$ times 2

| $x$ | $y$ | $(x, y)$ |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Line $q$
Rule: $y$ is $x$ times 3

| $x$ | $y$ | $(x, y)$ |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |



## Lesson 10

Line $p$
Rule: $y$ is 0 more than $x$
Rule:
Line $b$

| $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: |
| 7 |  |  |
| 10 |  |  |
| 13 |  |  |
| 18 |  |  |

Line $c$
Rule:

| $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: |
| 2 |  |  |
| 4 |  |  |
| 8 |  |  |
| 11 |  |  |

Line $d$
Rule: $\qquad$

| $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: |
| 5 |  |  |
| 7 |  |  |
| 12 |  |  |
| 15 |  |  |


coordinate plane

Line g Rule:

| $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: |
| 1 |  |  |
| 2 |  |  |
| 5 |  |  |
| 7 |  |  |

Line h Rule:

| $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: |
| 3 |  |  |
| 6 |  |  |
| 12 |  |  |
| 15 |  |  |



Lesson 11

Number Correct: $\qquad$

Round to the Nearest One

| 1. | 3.1 ~ |  | 23. | 12.51 ~ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2. | 3.2 ~ |  | 24. | 16.61 ~ |  |
| 3. | 3.3 ~ |  | 25. | 17.41 ~ |  |
| 4. | 3.4 ~ |  | 26. | 11.51 ~ |  |
| 5. | 3.5 ~ |  | 27. | 11.49 ~ |  |
| 6. | 3.6 ~ |  | 28. | 13.49 ~ |  |
| 7. | 3.9 ~ |  | 29. | 13.51 ~ |  |
| 8. | 13.9 ~ |  | 30. | 15.51 ~ |  |
| 9. | 13.1 ~ |  | 31. | 15.49 ~ |  |
| 10. | 13.5 ~ |  | 32. | 6.3 ~ |  |
| 11. | 7.5 ~ |  | 33. | 7.6 ~ |  |
| 12. | 8.5 ~ |  | 34. | 49.5 ~ |  |
| 13. | 9.5 ~ |  | 35. | 3.45 ~ |  |
| 14. | 19.5 ~ |  | 36. | 17.46 ~ |  |
| 15. | 29.5 ~ |  | 37. | 11.76 ~ |  |
| 16. | 89.5 ~ |  | 38. | 5.2 ~ |  |
| 17. | 2.4 ~ |  | 39. | 12.8 ~ |  |
| 18. | 2.41 ~ |  | 40. | 59.5 ~ |  |
| 19. | 2.42 ~ |  | 41. | 5.45 ~ |  |
| 20. | 2.45 ~ |  | 42. | 19.47 ~ |  |
| 21. | 2.49 ~ |  | 43. | 19.87 ~ |  |
| 22. | 2.51 ~ |  | 44. | 69.51 ~ |  |

Number Correct: $\qquad$
Improvement: $\qquad$
Round to the Nearest One

| 1. | 4.1 ~ |  |
| :---: | :---: | :---: |
| 2. | 4.2 ~ |  |
| 3. | 4.3 ~ |  |
| 4. | 4.4 ~ |  |
| 5. | 4.5 ~ |  |
| 6. | 4.6 ~ |  |
| 7. | 4.9 ~ |  |
| 8. | 14.9 ~ |  |
| 9. | 14.1 ~ |  |
| 10. | 14.5 ~ |  |
| 11. | 7.5 ~ |  |
| 12. | 8.5 ~ |  |
| 13. | 9.5 ~ |  |
| 14. | 19.5 ~ |  |
| 15. | 29.5 ~ |  |
| 16. | 79.5 ~ |  |
| 17. | 3.4 ~ |  |
| 18. | 3.41 ~ |  |
| 19. | 3.42 ~ |  |
| 20. | 3.45 ~ |  |
| 21. | 3.49 ~ |  |
| 22. | 3.51 ~ |  |


| 23. | 13.51 ~ |  |
| :---: | :---: | :---: |
| 24. | 17.61 ~ |  |
| 25. | 18.41 ~ |  |
| 26. | 12.51 ~ |  |
| 27. | 12.49 ~ |  |
| 28. | 14.49 ~ |  |
| 29. | 14.51 ~ |  |
| 30. | 16.51 ~ |  |
| 31. | 16.49 ~ |  |
| 32. | 7.3 ~ |  |
| 33. | 8.6 ~ |  |
| 34. | 39.5 ~ |  |
| 35. | 4.45 ~ |  |
| 36. | 18.46 ~ |  |
| 37. | 12.76 ~ |  |
| 38. | 6.2 ~ |  |
| 39. | 13.8 ~ |  |
| 40. | 49.5 ~ |  |
| 41. | 6.45 ~ |  |
| 42. | 19.48 ~ |  |
| 43. | 19.78 ~ |  |
| 44. | 59.51 ~ |  |

Line $l$
Line $m$

Rule: Triple $x$, and then add 3

| $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: |
| 0 |  |  |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |

Line $n$
Rule: Triple $x$, and then subtract 2

| $x$ | $y$ | $(x, y)$ |
| :---: | :---: | :---: |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |



## Lesson 12

## A

Number Correct: $\qquad$

Subtract Decimals

| 1. | $5-1=$ | 23. | $7.985-0.002=$ |  |
| :---: | :---: | :---: | :---: | :---: |
| 2. | $5.9-1=$ | 24. | $7.985-0.004=$ |  |
| 3. | $5.93-1=$ | 25. | $2.7-0.1=$ |  |
| 4. | $5.932-1=$ | 26. | $2.785-0.1=$ |  |
| 5. | $5.932-2=$ | 27. | $2.785-0.5=$ |  |
| 6. | $5.932-4=$ | 28. | $4.913-0.4=$ |  |
| 7. | $0.5-0.1=$ | 29. | $3.58-0.01=$ |  |
| 8. | $0.53-0.1=$ | 30. | $3.586-0.01=$ |  |
| 9. | $0.539-0.1=$ | 31. | $3.586-0.05=$ |  |
| 10. | $8.539-0.1=$ | 32. | $7.982-0.04=$ |  |
| 11. | $8.539-0.2=$ | 33. | $6.126-0.001=$ |  |
| 12. | $8.539-0.4=$ | 34. | $6.126-0.004=$ |  |
| 13. | $0.05-0.01=$ | 35. | $9.348-0.006=$ |  |
| 14. | $0.057-0.01=$ | 36. | $8.347-0.3=$ |  |
| 15. | $1.057-0.01=$ | 37. | $9.157-0.05=$ |  |
| 16. | $1.857-0.01=$ | 38. | $6.879-0.009=$ |  |
| 17. | $1.857-0.02=$ | 39. | $6.548-2=$ |  |
| 18. | $1.857-0.04=$ | 40. | $6.548-0.2=$ |  |
| 19. | $0.005-0.001=$ | 41. | $6.548-0.02=$ |  |
| 20. | $7.005-0.001=$ | 42. | $6.548-0.002=$ |  |
| 21. | $7.905-0.001=$ | 43. | $6.196-0.06=$ |  |
| 22. | $7.985-0.001=$ | 44. | $9.517-0.004=$ |  |

Number Correct: $\qquad$
Improvement: $\qquad$
Subtract Decimals

| 1. | 6-1 = |  |
| :---: | :---: | :---: |
| 2. | $6.9-1=$ |  |
| 3. | $6.93-1=$ |  |
| 4. | $6.932-1=$ |  |
| 5. | $6.932-2=$ |  |
| 6. | $6.932-4=$ |  |
| 7. | 0.6-0.1 = |  |
| 8. | $0.63-0.1=$ |  |
| 9. | $0.639-0.1=$ |  |
| 10. | $8.639-0.1=$ |  |
| 11. | $8.639-0.2=$ |  |
| 12. | $8.639-0.4=$ |  |
| 13. | $0.06-0.01=$ |  |
| 14. | $0.067-0.01=$ |  |
| 15. | $1.067-0.01=$ |  |
| 16. | $1.867-0.01=$ |  |
| 17. | $1.867-0.02=$ |  |
| 18. | $1.867-0.04=$ |  |
| 19. | $0.006-0.001=$ |  |
| 20. | $7.006-0.001=$ |  |
| 21. | $7.906-0.001=$ |  |
| 22. | $7.986-0.001=$ |  |


| 23. | $7.986-0.002=$ |  |
| :---: | :---: | :---: |
| 24. | $7.986-0.004=$ |  |
| 25. | $3.7-0.1=$ |  |
| 26. | $3.785-0.1=$ |  |
| 27. | $3.785-0.5=$ |  |
| 28. | $5.924-0.4=$ |  |
| 29. | $4.58-0.01=$ |  |
| 30. | $4.586-0.01=$ |  |
| 31. | $4.586-0.05=$ |  |
| 32. | $6.183-0.04=$ |  |
| 33. | $7.127-0.001=$ |  |
| 34. | $7.127-0.004=$ |  |
| 35. | $1.459-0.006=$ |  |
| 36. | $8.457-0.4=$ |  |
| 37. | $1.267-0.06=$ |  |
| 38. | $7.981-0.001=$ |  |
| 39. | 7.548-2 = |  |
| 40. | $7.548-0.2=$ |  |
| 41. | $7.548-0.02=$ |  |
| 42. | $7.548-0.002=$ |  |
| 43. | $7.197-0.06=$ |  |
| 44. | $1.627-0.004=$ |  |

## Line $l$

Line $m$
Rule: $\qquad$ Rule: $\qquad$

| Point | $\boldsymbol{x}$ | $\boldsymbol{y}$ | $(x, y)$ |
| :---: | :---: | :---: | :---: |
| $A$ | $1 \frac{1}{2}$ | 3 | $\left(1 \frac{1}{2}, 3\right)$ |
| $B$ |  |  |  |
| $C$ |  |  |  |
| $D$ |  |  |  |


| Point | $\boldsymbol{x}$ | $\boldsymbol{y}$ | $(x, y)$ |
| :---: | :---: | :---: | :---: |
| $A$ |  |  |  |
| $E$ |  |  |  |
| $F$ |  |  |  |
| $G$ |  |  |  |


coordinate plane

## Lesson 13

Number Correct: $\qquad$

Subtracting Fractions from a Whole Number

| 1. | $4-\frac{1}{2}=$ |  |
| :---: | :---: | :---: |
| 2. | $3-\frac{1}{2}=$ |  |
| 3. | $2-\frac{1}{2}=$ |  |
| 4. | $1-\frac{1}{2}=$ |  |
| 5. | $1-\frac{1}{3}=$ |  |
| 6. | $2-\frac{1}{3}=$ |  |
| 7. | $4-\frac{1}{3}=$ |  |
| 8. | $4-\frac{2}{3}=$ |  |
| 9. | $2-\frac{2}{3}=$ |  |
| 10. | $2-\frac{1}{4}=$ |  |
| 11. | $2-\frac{3}{4}=$ |  |
| 12. | $3-\frac{3}{4}=$ |  |
| 13. | $3-\frac{1}{4}=$ |  |
| 14. | $4-\frac{3}{4}=$ |  |
| 15. | $2-\frac{1}{10}=$ |  |
| 16. | $3-\frac{9}{10}=$ |  |
| 17. | $2-\frac{7}{10}=$ |  |
| 18. | $4-\frac{3}{10}=$ |  |
| 19. | $3-\frac{1}{5}=$ |  |
| 20. | $3-\frac{2}{5}=$ |  |
| 21. | $3-\frac{4}{5}=$ |  |
| 22. | $3-\frac{3}{5}=$ |  |


| 23. | $3-\frac{1}{8}=$ |  |
| :---: | :---: | :---: |
| 24. | $3-\frac{3}{8}=$ |  |
| 25. | $3-\frac{5}{8}=$ |  |
| 26. | $3-\frac{7}{8}=$ |  |
| 27. | $2-\frac{7}{8}=$ |  |
| 28. | $4-\frac{1}{7}=$ |  |
| 29. | $3-\frac{6}{7}=$ |  |
| 30. | $2-\frac{3}{7}=$ |  |
| 31. | $4-\frac{4}{7}=$ |  |
| 32. | $3-\frac{5}{7}=$ |  |
| 33. | $4-\frac{3}{4}=$ |  |
| 34. | $2-\frac{5}{8}=$ |  |
| 35. | $3-\frac{3}{10}=$ |  |
| 36. | $4-\frac{2}{5}=$ |  |
| 37. | $4-\frac{3}{7}=$ |  |
| 38. | $3-\frac{7}{10}=$ |  |
| 39. | $3-\frac{5}{10}=$ |  |
| 40. | $4-\frac{2}{8}=$ |  |
| 41. | $2-\frac{9}{12}=$ |  |
| 42. | $4-\frac{2}{12}=$ |  |
| 43. | $3-\frac{2}{6}=$ |  |
| 44. | $2-\frac{8}{12}=$ |  |

Number Correct: $\qquad$
Improvement: $\qquad$
Subtracting Fractions from a Whole Number

| 1. | $1-\frac{1}{2}=$ |  |
| :---: | :---: | :---: |
| 2. | $2-\frac{1}{2}=$ |  |
| 3. | $3-\frac{1}{2}=$ |  |
| 4. | $4-\frac{1}{2}=$ |  |
| 5. | $1-\frac{1}{4}=$ |  |
| 6. | $2-\frac{1}{4}=$ |  |
| 7. | $4-\frac{1}{4}=$ |  |
| 8. | $4-\frac{3}{4}=$ |  |
| 9. | $2-\frac{3}{4}=$ |  |
| 10. | $2-\frac{1}{3}=$ |  |
| 11. | $2-\frac{2}{3}=$ |  |
| 12. | $3-\frac{2}{3}=$ |  |
| 13. | $3-\frac{1}{3}=$ |  |
| 14. | $4-\frac{2}{3}=$ |  |
| 15. | $3-\frac{1}{10}=$ |  |
| 16. | $2-\frac{9}{10}=$ |  |
| 17. | $4-\frac{7}{10}=$ |  |
| 18. | $3-\frac{3}{10}=$ |  |
| 19. | $2-\frac{1}{5}=$ |  |
| 20. | $2-\frac{2}{5}=$ |  |
| 21. | $2-\frac{4}{5}=$ |  |
| 22. | $3-\frac{3}{5}=$ |  |


| 23. | $2-\frac{1}{8}=$ |  |
| :---: | :---: | :---: |
| 24. | $2-\frac{3}{8}=$ |  |
| 25. | $2-\frac{5}{8}=$ |  |
| 26. | $2-\frac{7}{8}=$ |  |
| 27. | $4-\frac{7}{8}=$ |  |
| 28. | $3-\frac{1}{7}=$ |  |
| 29. | $2-\frac{6}{7}=$ |  |
| 30. | $4-\frac{3}{7}=$ |  |
| 31. | $3-\frac{4}{7}=$ |  |
| 32. | $2-\frac{5}{7}=$ |  |
| 33. | $3-\frac{3}{4}=$ |  |
| 34. | $4-\frac{5}{8}=$ |  |
| 35. | $2-\frac{3}{10}=$ |  |
| 36. | $3-\frac{2}{5}=$ |  |
| 37. | $3-\frac{3}{7}=$ |  |
| 38. | $2-\frac{7}{10}=$ |  |
| 39. | $2-\frac{5}{10}=$ |  |
| 40. | $3-\frac{6}{8}=$ |  |
| 41. | $4-\frac{3}{12}=$ |  |
| 42. | $3-\frac{10}{12}=$ |  |
| 43. | $2-\frac{4}{6}=$ |  |
| 44. | $4-\frac{4}{12}=$ |  |

Lesson 14

| Coins in Maria's Piggy Bank |  |  |
| :---: | :---: | :---: |
| Coin | Tally | Number of Coins |
| Penny | HH HHH HH HHH HH HH HH HH HH HH HHH HH HH III |  |
| Nickel | HH HH HH HH HH HH HH HH HH HH HH HH // |  |
| Dime | HH HHH HH HHH HH HH HH HH HH HH HH /I |  |
| Quarter | HHH HHH HHH HHH //I/ |  |



## Lesson 15

| Favorite Subjects |  |
| :---: | :---: |
| Subject | Number of Student Votes |
| Math | 18 |
| ELA | 13 |
| History | 17 |
| Science | $?$ |



## Lesson 16



|  |  | Day | Night |
| :---: | :---: | :---: | :---: |
| Wed 16 |  | High: $11^{\circ} \mathrm{C}$ | Low: $6^{\circ} \mathrm{C}$ |
| Thu 17 |  | High: $11^{\circ} \mathrm{C}$ | Low: $5^{\circ} \mathrm{C}$ |
| Fri 18 |  | High: $13^{\circ} \mathrm{C}$ | Low: $7^{\circ} \mathrm{C}$ |
| Sat 19 |  | High: $12^{\circ} \mathrm{C}$ | Low: $5^{\circ} \mathrm{C}$ |
| Sun 20 |  | High: $8^{\circ} \mathrm{C}$ | Low: $1^{\circ} \mathrm{C}$ |
| Mon 21 |  | High: $2^{\circ} \mathrm{C}$ | Low: $0^{\circ} \mathrm{C}$ |
| Tue 22 |  | High: $3^{\circ} \mathrm{C}$ | Low: $0^{\circ} \mathrm{C}$ |
| Wed 23 |  | High: $4^{\circ} \mathrm{C}$ | Low: $0^{\circ} \mathrm{C}$ |
| Thu 24 |  | High: $8^{\circ} \mathrm{C}$ | Low: $4^{\circ} \mathrm{C}$ |
| Fri 25 |  | High: $13^{\circ} \mathrm{C}$ | Low: $10^{\circ} \mathrm{C}$ |




## Lesson 17




| Index Finger (cm) | Ring Finger (cm) |
| :--- | :--- |
|  |  |
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Finger Lengths for Students in Our Class


## Lesson 18



| Height <br> (in) | 65.7 | 57.1 | 61.4 | 59.8 | 59.8 | 59.1 | 61.8 | 61 | 57.1 | 61.8 | 57.5 | 57.9 | 56.1 | 55.9 | 55.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arm <br> Span (in) | 69.3 | 64.2 | 63.8 | 63 | 61.8 | 61.8 | 60.6 | 58.7 | 57.9 | 57.5 | 57.1 | 55.5 | 55.1 | 53.1 | 52.4 |



Lesson 21
$\qquad$

Change Mixed Numbers into Improper Fractions

| 1. | $1 \frac{1}{5}=$ |  |
| :---: | :---: | :---: |
| 2. | $2 \frac{1}{5}=$ |  |
| 3. | $3 \frac{1}{5}=$ |  |
| 4. | $4 \frac{1}{5}=$ |  |
| 5. | $1 \frac{1}{4}=$ |  |
| 6. | $1 \frac{3}{4}=$ |  |
| 7. | $1 \frac{2}{5}=$ |  |
| 8. | $1 \frac{3}{5}=$ |  |
| 9. | $1 \frac{4}{5}=$ |  |
| 10. | $2 \frac{4}{5}=$ |  |
| 11. | $3 \frac{4}{5}=$ |  |
| 12. | $2 \frac{1}{4}=$ |  |
| 13. | $2 \frac{3}{4}=$ |  |
| 14. | $3 \frac{1}{4}=$ |  |
| 15. | $3 \frac{3}{4}=$ |  |
| 16. | $4 \frac{1}{3}=$ |  |
| 17. | $4 \frac{2}{3}=$ |  |
| 18. | $2 \frac{3}{5}=$ |  |
| 19. | $3 \frac{3}{5}=$ |  |
| 20. | $4 \frac{3}{5}=$ |  |
| 21. | $2 \frac{1}{6}=$ |  |
| 22. | $3 \frac{1}{8}=$ |  |


| 23. | $2 \frac{7}{10}=$ |  |
| :---: | :---: | :---: |
| 24. | $4 \frac{9}{10}=$ |  |
| 25. | $1 \frac{1}{8}=$ |  |
| 26. | $1 \frac{5}{6}=$ |  |
| 27. | $4 \frac{5}{6}=$ |  |
| 28. | $4 \frac{5}{8}=$ |  |
| 29. | $1 \frac{5}{8}=$ |  |
| 30. | $2 \frac{3}{8}=$ |  |
| 31. | $3 \frac{3}{10}=$ |  |
| 32. | $4 \frac{7}{10}=$ |  |
| 33. | $4 \frac{4}{5}=$ |  |
| 34. | $4 \frac{1}{8}=$ |  |
| 35. | $4 \frac{3}{8}=$ |  |
| 36. | $4 \frac{7}{8}=$ |  |
| 37. | $1 \frac{5}{12}=$ |  |
| 38. | $1 \frac{7}{12}=$ |  |
| 39. | $2 \frac{1}{12}=$ |  |
| 40. | $3 \frac{1}{12}=$ |  |
| 41. | $2 \frac{7}{12}=$ |  |
| 42. | $3 \frac{5}{12}=$ |  |
| 43. | $3 \frac{11}{12}=$ |  |
| 44. | $4 \frac{7}{12}=$ |  |

Number Correct: $\qquad$
Improvement: $\qquad$
Change Mixed Numbers into Improper Fractions

| 1. | $1 \frac{1}{2}=$ | 23. | $2 \frac{3}{10}=$ |  |
| :---: | :---: | :---: | :---: | :---: |
| 2. | $2 \frac{1}{2}=$ | 24. | $3 \frac{1}{10}=$ |  |
| 3. | $3 \frac{1}{2}=$ | 25. | $1 \frac{1}{6}=$ |  |
| 4. | $4 \frac{1}{2}=$ | 26. | $1 \frac{3}{8}=$ |  |
| 5. | $1 \frac{1}{3}=$ | 27. | $3 \frac{5}{6}=$ |  |
| 6. | $1 \frac{2}{3}=$ | 28. | $3 \frac{5}{8}=$ |  |
| 7. | $1 \frac{3}{10}=$ | 29. | $2 \frac{5}{8}=$ |  |
| 8. | $1 \frac{7}{10}=$ | 30. | $1 \frac{7}{8}=$ |  |
| 9. | $1 \frac{9}{10}=$ | 31. | $4 \frac{3}{10}=$ |  |
| 10. | $2 \frac{9}{10}=$ | 32. | $3 \frac{7}{10}=$ |  |
| 11. | $3 \frac{9}{10}=$ | 33. | $2 \frac{5}{6}=$ |  |
| 12. | $2 \frac{1}{3}=$ | 34. | $2 \frac{7}{8}=$ |  |
| 13. | $2 \frac{2}{3}=$ | 35. | $3 \frac{7}{8}=$ |  |
| 14. | $3 \frac{1}{3}=$ | 36. | $4 \frac{1}{6}=$ |  |
| 15. | $3 \frac{2}{3}=$ | 37. | $1 \frac{1}{12}=$ |  |
| 16. | $4 \frac{1}{4}=$ | 38. | $1 \frac{11}{12}=$ |  |
| 17. | $4 \frac{3}{4}=$ | 39. | $4 \frac{1}{12}=$ |  |
| 18. | $2 \frac{2}{5}=$ | 40. | $2 \frac{5}{12}=$ |  |
| 19. | $3 \frac{2}{5}=$ | 41. | $2 \frac{11}{12}=$ |  |
| 20. | $4 \frac{2}{5}=$ | 42. | $3 \frac{7}{12}=$ |  |
| 21. | $3 \frac{1}{6}=$ | 43. | $4 \frac{5}{12}=$ |  |
| 22. | $2 \frac{1}{8}=$ | 44. | $4 \frac{11}{12}=$ |  |

Lesson 24


Table C


Table B

| Point | $(x, y)$ |
| :---: | :---: |
| $I$ |  |
| $H$ |  |
| $G$ |  |
| $F$ |  |

Table D


Table E

| Point | $(x, y)$ |
| :---: | :---: |
| $A$ | $(1,1)$ |
| $B$ | $\left(1 \frac{1}{2}, 3 \frac{1}{2}\right)$ |
| $C$ | $(2,3)$ |
| $D$ | $\left(2 \frac{1}{2}, 3 \frac{1}{2}\right)$ |
| $E$ | $\left(2 \frac{1}{2}, 2 \frac{1}{2}\right)$ |
| $F$ | $\left(3 \frac{1}{2}, 2 \frac{1}{2}\right)$ |
| $G$ | $(3,2)$ |
| $H$ | $\left(3 \frac{1}{2}, 1 \frac{1}{2}\right)$ |

coordinate plane

$\square$
EUREKA MAREA'

Lesson 24: Draw symmetric figures on the coordinate plane.

## Lesson 25

## A

Number Correct: $\qquad$

Make Larger Units

| 1. | $2 / 4=$ |  |
| :---: | :---: | :---: |
| 2. | $2 / 6=$ |  |
| 3. | $2 / 8=$ |  |
| 4. | $5 / 10=$ |  |
| 5. | $5 / 15=$ |  |
| 6. | $5 / 20=$ |  |
| 7. | $4 / 8=$ |  |
| 8. | $4 / 12=$ |  |
| 9. | $4 / 16=$ |  |
| 10. | $3 / 6=$ |  |
| 11. | $3 / 9=$ |  |
| 12. | $3 / 12=$ |  |
| 13. | $4 / 6=$ |  |
| 14. | $6 / 12=$ |  |
| 15. | $6 / 18=$ |  |
| 16. | $6 / 30=$ |  |
| 17. | $6 / 9=$ |  |
| 18. | $7 / 14=$ |  |
| 19. | $7 / 21=$ |  |
| 20. | $7 / 42=$ |  |
| 21. | $8 / 12=$ |  |
| 22. | $9 / 18=$ |  |


| 23. | $9 / 27=$ |  |
| :---: | :---: | :---: |
| 24. | $9 / 63=$ |  |
| 25. | $8 / 12=$ |  |
| 26. | $8 / 16=$ |  |
| 27. | $8 / 24=$ |  |
| 28. | $8 / 64=$ |  |
| 29. | $12 / 18=$ |  |
| 30. | $12 / 16=$ |  |
| 31. | $9 / 12=$ |  |
| 32. | $6 / 8=$ |  |
| 33. | $10 / 12=$ |  |
| 34. | $15 / 18=$ |  |
| 35. | $8 / 10=$ |  |
| 36. | $16 / 20=$ |  |
| 37. | $12 / 15=$ |  |
| 38. | $18 / 27=$ |  |
| 39. | $27 / 36=$ |  |
| 40. | $32 / 40=$ |  |
| 41. | $45 / 54=$ |  |
| 42. | $24 / 36=$ |  |
| 43. | $60 / 72=$ |  |
| 44. | $48 / 60=$ |  |

Number Correct: $\qquad$ Improvement: $\qquad$
Make Larger Units

| 1. | $5 / 10=$ |  |
| :---: | :---: | :---: |
| 2. | $5 / 15=$ |  |
| 3. | $5 / 20=$ |  |
| 4. | $2 / 4=$ |  |
| 5. | $2 / 6=$ |  |
| 6. | $2 / 8=$ |  |
| 7. | $3 / 6=$ |  |
| 8. | $3 / 9=$ |  |
| 9. | $3 / 12=$ |  |
| 10. | $4 / 8=$ |  |
| 11. | $4 / 12=$ |  |
| 12. | 4/16 = |  |
| 13. | $4 / 6=$ |  |
| 14. | $7 / 14=$ |  |
| 15. | $7 / 21=$ |  |
| 16. | $7 / 35=$ |  |
| 17. | $6 / 9=$ |  |
| 18. | $6 / 12=$ |  |
| 19. | $6 / 18=$ |  |
| 20. | $6 / 36=$ |  |
| 21. | $8 / 12=$ |  |
| 22. | $8 / 16=$ |  |


| 23. | $8 / 24=$ |  |
| :---: | :---: | :---: |
| 24. | $8 / 56=$ |  |
| 25. | $8 / 12=$ |  |
| 26. | $9 / 18=$ |  |
| 27. | $9 / 27=$ |  |
| 28. | $9 / 72=$ |  |
| 29. | $12 / 18=$ |  |
| 30. | $6 / 8=$ |  |
| 31. | $9 / 12=$ |  |
| 32. | $12 / 16=$ |  |
| 33. | $8 / 10=$ |  |
| 34. | $16 / 20=$ |  |
| 35. | $12 / 15=$ |  |
| 36. | $10 / 12=$ |  |
| 37. | $15 / 18=$ |  |
| 38. | $16 / 24=$ |  |
| 39. | $24 / 32=$ |  |
| 40. | $36 / 45=$ |  |
| 41. | $40 / 48=$ |  |
| 42. | $24 / 36=$ |  |
| 43. | $48 / 60=$ |  |
| 44. | $60 / 72=$ |  |


line graph practice sheet

## Lesson 26

| six sevenths of nine | two thirds the sum of twenty-three and fifty-seven | forty-three less than three fifths of the product of ten and twenty | five sixths the difference of three hundred twenty-nine and two hundred eighty-one |
| :---: | :---: | :---: | :---: |
| three times as much as the sum of three fourths and two thirds | the difference between thirty thirties and twenty-eight thirties | twenty-seven more than half the sum of four and one eighth and six and two thirds | the sum of eightyeight and fifty-six divided by twelve |
| the product of nine and eight divided by four | one sixth the product of twelve and four | six copies of the sum of six twelfths and three fourths | double three fourths of eighteen |

expression cards
$96 \times\left(63+\frac{17}{12}\right)$
$\left(437 \times \frac{9}{15}\right) \times \frac{6}{8}$

$4 \times 15.87$
$(8.96 \times 3)+(5.07 \times 8)$
$\frac{12}{7} \times\left(\frac{5}{4}+\frac{5}{9}\right)$
 $(96 \times 63)+\frac{17}{12}$
$\left(437 \times \frac{9}{15}\right) \times \frac{7}{8}$

$$
\begin{aligned}
& 4 \times 8.35+4 \times 6.21 \\
& \frac{6}{7} \times(3,065+4,562)
\end{aligned}
$$



$$
\left(297 \times \frac{16}{15}\right)+\frac{8}{3}
$$

$\left(297 \times \frac{13}{15}\right)+\frac{8}{3}$
$(3,065+4,562)+\frac{6}{7}$
comparing expressions game board

## Lesson 27

Name
Date

How did teaching other students how to solve a word problem strengthen your skills as a problem solver? What did you learn about your problem-solving skills? What are your strengths and weaknesses as a problem solver?

## Lesson 28

What math skills have you improved through our Fluency Practice this year? How do you know you've improved? What math skills do you need to continue to practice this summer? Why?

## Write Fractions as Mixed Numbers

Materials: (S) Personal white board
$\mathrm{T}: \quad$ (Write $\frac{13}{2}=$ $\qquad$ $\div$ $\qquad$ $=$ $\qquad$ .) Write the fraction as a division problem and mixed number.

S: (Write $\frac{13}{2}=13 \div 2=6 \frac{1}{2}$.)
More practice!
$\frac{11}{2}, \frac{17}{2}, \frac{44}{2}, \frac{31}{10}, \frac{23}{10}, \frac{47}{10}, \frac{89}{10}, \frac{8}{3}, \frac{13}{3}, \frac{26}{3}, \frac{9}{4}, \frac{13}{4}, \frac{15}{4}$, and $\frac{35}{4}$.

## Convert to Hundredths

Materials: (S) Personal white board
T: (Write $\frac{3}{4}=\frac{}{100}$.) 4 times what factor equals 100?

S: 25.
T: Write the equivalent fraction.
S: (Write $\frac{3}{4}=\frac{75}{100}$.)
More practice!

$$
\begin{aligned}
& \frac{3}{4}=\frac{}{100}, \frac{1}{50}=\frac{}{100}, \frac{3}{50}=\frac{}{100}, \frac{1}{20}=\frac{}{100}, \frac{3}{20}=\frac{}{100}, \\
& \frac{1}{25}=\frac{}{100}, \text { and } \frac{2}{25}=\frac{}{100} .
\end{aligned}
$$

## Fraction of a Set

Materials: (S) Personal white board
T: (Write $\frac{1}{2} \times 10$.) Draw a strip diagram to model the whole number.
S: (Draw a strip diagram, and label it 10.)
T: Draw a line to split the strip diagram in half.
S: (Draw a line.)
T : What is the value of each part of your strip diagram?

S: 5.
T : So, what is $\frac{1}{2}$ of 10 ?
S: 5 .
More practice!
$8 \times \frac{1}{2}, 8 \times \frac{1}{4}, 6 \times \frac{1}{3}, 30 \times \frac{1}{6}, 42 \times \frac{1}{7}, 42 \times \frac{1}{6}, 48 \times \frac{1}{8}, 54 \times \frac{1}{9}$, and $54 \times \frac{1}{6}$.

## Multiply a Fraction and a Whole Number

Materials: (S) Personal white board
T: (Write $\frac{8}{4}$.) Write the corresponding division sentence.
S: (Write $8 \div 4=2$.)
T: (Write $\frac{1}{4} \times 8$.) Write the complete multiplication sentence.
S: (Write $\frac{1}{4} \times 8=2$.)
More practice!
$\frac{18}{6}, \frac{15}{3}, \frac{18}{3}, \frac{27}{9}, \frac{54}{6}, \frac{51}{3}$, and $\frac{63}{7}$.

## Multiply Mentally

Materials: (S) Personal white board
T: (Write $9 \times 10$.) On your personal white board, write the complete multiplication sentence.
S: (Write $9 \times 10=90$.)
T: (Write $9 \times 9=90$ - $\qquad$ below $9 \times 10=$ 90.) Write the number sentence, filling in the blank.
S: (Write $9 \times 9=90-9$.)
T: $\quad 9 \times 9$ is...?
S: 81.
More practice!
$9 \times 99,15 \times 9$, and $29 \times 99$.

## One Unit More

Materials: (S) Personal white board
T: (Write 5 tenths.) On your personal white board, write the decimal that's one-tenth more than 5 tenths.
S: (Write 0.6.)

## More practice!

5 hundredths, 5 thousandths, 8 hundredths, and 2 thousandths. Specify the unit of increase.

T : (Write 0.052.) Write one more thousandth.
S: (Write 0.053.)

## More practice!

1 tenth more than 35 hundredths,
1 thousandth more than 35 hundredths, and 1 hundredth more than 438 thousandths.

## Find the Product

Materials: (S) Personal white board
T: (Write $4 \times 3$.) Complete the multiplication sentence giving the second factor in unit form.
S: (Write $4 \times 3$ ones $=12$ ones.)
T: (Write $4 \times 0.2$.) Complete the multiplication sentence giving the second factor in unit form.
S: (Write $4 \times 2$ tenths $=8$ tenths.)
T: (Write $4 \times 3.2$.) Complete the multiplication sentence giving the second factor in unit form.
S: (Write $4 \times 3$ ones 2 tenths $=12$ ones 8 tenths.)
T: Write the complete multiplication sentence.
S: (Write $4 \times 3.2=12.8$.)
More practice!
$4 \times 3.21,9 \times 2,9 \times 0.1,9 \times 0.03,9 \times 2.13,4.01 \times 4$, and $5 \times 3.23$.

## Add and Subtract Decimals

Materials: (S) Personal white board
T: (Write 7 ones +258 thousandths + 1 hundredth = $\qquad$ .) Write the addition sentence in decimal form.
S: (Write $7+0.258+0.01=7.268$.

## More practice!

7 ones +258 thousandths +3 hundredths,
6 ones +453 thousandths +4 hundredths,
2 ones +37 thousandths +5 tenths, and
6 ones +35 hundredths +7 thousandths.
T: (Write 4 ones +8 hundredths -2 ones $=$
$\qquad$ ones $\qquad$ hundredths.) Write the subtraction sentence in decimal form.
S: (Write 4.08-2 = 2.08.)
More practice!
9 tenths + 7 thousandths -4 thousandths,
4 ones +582 thousandths -3 hundredths,
9 ones +708 thousandths -4 tenths, and
4 ones +73 thousandths -4 hundredths.

## Decompose Decimals

Materials: (S) Personal white board
T: (Project 7.463.) Say the number.
S: 7 and 463 thousandths.
T: Represent this number in a twopart number bond
 with ones as one part and thousandths as the other part.
$\mathrm{S}: \quad$ (Draw.)
T: Represent it again with tenths and thousandths.

S: (Draw.)
T: Represent it again with hundredths and thousandths.

More practice!
8.972 and 6.849 .

## Make a Like Unit

Materials: (S) Personal white board
T: I will say two unit fractions. You make the like unit, and write it on your personal white board. Show your board at the signal.
T: $\quad \frac{1}{3}$ and $\frac{1}{2}$. (Pause. Signal.)
S: (Write and show sixths.)
More practice!
$\frac{1}{4}$ and $\frac{1}{3}, \frac{1}{2}$ and $\frac{1}{4}, \frac{1}{6}$ and $\frac{1}{2}, \frac{1}{3}$ and $\frac{1}{12}, \frac{1}{6}$ and $\frac{1}{8}$, and $\frac{1}{3}$ and $\frac{1}{9}$.

## Find the Volume

Materials: (S) Personal white board
$\mathrm{T}: \quad$ On your personal white board, write the formula for finding the volume of a rectangular prism.
S: (Write V $=I \times w \times h$.)
T : (Draw and label a rectangular prism with a length of 5 cm , width of 6 cm , and height of 2 cm .) Write a multiplication sentence to find the volume of this rectangular prism.
S: (Beneath V $=/ \times w \times h$, write $V=5 \mathrm{~cm} \times$ $6 \mathrm{~cm} \times 2 \mathrm{~cm}$. Beneath it, write $V=60 \mathrm{~cm}^{3}$.)

More practice!
$I=7 \mathrm{ft}, w=9 \mathrm{ft}, h=3 \mathrm{ft}$;
$I=6 \mathrm{in}, w=6 \mathrm{in}, h=5 \mathrm{in} ;$ and
$l=4 \mathrm{~cm}, w=8 \mathrm{~cm}, h=2 \mathrm{~cm}$.

## Unit Conversions

Materials: (S) Personal white board
T: (Write 12 in = $\qquad$ ft.) On your personal white board, write 12 inches is the same as how many feet?
S: (Write 1 foot.)
More practice!
$24 \mathrm{in}, 36 \mathrm{in}, 54 \mathrm{in}$, and 76 in.
$\mathrm{T}: \quad$ (Write $1 \mathrm{ft}=$ $\qquad$ in.) Write 1 foot is the same as how many inches?
S: (Write 12 inches.)
More practice!
$2 \mathrm{ft}, 2.5 \mathrm{ft}, 3 \mathrm{ft}, 3.5 \mathrm{ft}, 4 \mathrm{ft}, 4.5 \mathrm{ft}, 9 \mathrm{ft}$, and 9.5 ft .

## Compare Decimal Fractions

Materials: (S) Personal white board
T: (Write 13.78 $\qquad$ 13.86.) On your personal white board, compare the numbers using the greater than, less than, or equal sign.
S: (Write 13.78 < 13.86.)
More practice!
$0.78 \_\frac{78}{100}, 439.3 \ldots 4.39,5.08 \ldots$ fifty-eight tenths, and thirty-five and 9 thousandths $\qquad$ 4 tens.

## Divide Unit Fractions by Whole Numbers

Materials: (S) Personal white board
T: (Write $\frac{1}{2} \div 2$.) What is the size of a piece when $\frac{1}{2}$ is divided into 2 equal pieces?
S: $\frac{1}{4}$.
T: (Write $\frac{1}{2} \div 2=\frac{1}{4}$. Beneath it, write $\frac{1}{2} \div 4$.)
What is the size of a piece when $\frac{1}{2}$ is divided into 4 equal pieces?

S: $\quad \frac{1}{8}$.
T: (Write $\frac{1}{2} \div 4=\frac{1}{8}$. Beneath it, write $\frac{1}{4} \div 2$.) What is the size of a piece when $\frac{1}{4}$ is divided into 2 equal pieces?

S: $\quad \frac{1}{8}$.
T: (Write $\frac{1}{4} \div 2=\frac{1}{8}$. Beneath it, write $\frac{1}{3} \div 2$.) Write the complete division sentence.

S: (Write $\frac{1}{3} \div 2=\frac{1}{6}$.)
Continue with the following possible sequence: $\frac{1}{3} \div$
$3, \frac{1}{3} \div 4, \frac{1}{4} \div 3$ and $\frac{1}{5} \div 3$.

## Round to the Nearest One

Materials: (S) Personal white board
T: (Write 3 ones 2 tenths.) Write 3 ones and 2 tenths as a decimal.

S: (Write 3.2.)
T: (Write 3.2 ~ $\qquad$ .) Round 3 and 2 tenths to the nearest whole number.
S: (Write 3.2 ~ 3 .)
More practice!
$3.7,13.7,5.4,25.4,1.5,21.5,6.48,3.62$, and 36.52 .

## Divide Whole Numbers by Unit Fractions

Materials: (S) Personal white board
T: (Write $1 \div \frac{1}{2}$.) How many halves are in 1 ?
S: 2.
T: (Write $1 \div \frac{1}{2}=2$. Beneath it, write $2 \div \frac{1}{2}$.) How many halves are in 2 ?
S: 4.
T: (Write $2 \div \frac{1}{2}=4$. Beneath it, write $3 \div \frac{1}{2}$.) How many halves are in 3 ?
S: 6 .
T: (Write $3 \div \frac{1}{2}=6$. Beneath it, write $7 \div \frac{1}{2}$.) Write the complete division sentence.
S: (Write $7 \div \frac{1}{2}=14$. )
More practice!
$1 \div \frac{1}{3}, 2 \div \frac{1}{5}, 9 \div \frac{1}{4}$, and $3 \div \frac{1}{8}$.

## Lesson 29

$\qquad$

Multiply Decimals

| 1. | $3 \times 2=$ |  |
| :---: | :---: | :---: |
| 2. | $3 \times 0.2=$ |  |
| 3. | $3 \times 0.02=$ |  |
| 4. | $3 \times 3=$ |  |
| 5. | $3 \times 0.3=$ |  |
| 6. | $3 \times 0.03=$ |  |
| 7. | $2 \times 4=$ |  |
| 8. | $2 \times 0.4=$ |  |
| 9. | $2 \times 0.04=$ |  |
| 10. | $5 \times 3=$ |  |
| 11. | $5 \times 0.3=$ |  |
| 12. | $5 \times 0.03=$ |  |
| 13. | $7 \times 2=$ |  |
| 14. | $7 \times 0.2=$ |  |
| 15. | $7 \times 0.02=$ |  |
| 16. | $4 \times 3=$ |  |
| 17. | $4 \times 0.3=$ |  |
| 18. | $0.4 \times 3=$ |  |
| 19. | $0.4 \times 0.3=$ |  |
| 20. | $4 \times 0.03=$ |  |
| 21. | $3 \times 0.04=$ |  |
| 22. | $6 \times 2=$ |  |


| 23. | $0.6 \times 2=$ |  |
| :---: | :---: | :---: |
| 24. | $0.6 \times 0.2=$ |  |
| 25. | $6 \times 0.02=$ |  |
| 26. | $2 \times 0.06=$ |  |
| 27. | $5 \times 7=$ |  |
| 28. | $0.5 \times 7=$ |  |
| 29. | $0.5 \times 0.7=$ |  |
| 30. | $5 \times 0.07=$ |  |
| 31. | $7 \times 0.05=$ |  |
| 32. | $2 \times 8=$ |  |
| 33. | $9 \times 0.2=$ |  |
| 34. | $3 \times 7=$ |  |
| 35. | $8 \times 0.03=$ |  |
| 36. | $4 \times 6=$ |  |
| 37. | $0.6 \times 7=$ |  |
| 38. | $0.7 \times 0.7=$ |  |
| 39. | $0.8 \times 0.6=$ |  |
| 40. | $0.9 \times 0.6=$ |  |
| 41. | $6 \times 0.8=$ |  |
| 42. | $0.7 \times 0.9=$ |  |
| 43. | $0.8 \times 0.8=$ |  |
| 44. | $0.9 \times 0.8=$ |  |

Number Correct: $\qquad$
Improvement: $\qquad$
Multiply Decimals

| 1. | $4 \times 2=$ | 23. | $0.8 \times 2=$ |  |
| :---: | :---: | :---: | :---: | :---: |
| 2. | $4 \times 0.2=$ | 24. | $0.8 \times 0.2=$ |  |
| 3. | $4 \times 0.02=$ | 25. | $8 \times 0.02=$ |  |
| 4. | $2 \times 3=$ | 26. | $2 \times 0.08=$ |  |
| 5. | $2 \times 0.3=$ | 27. | $5 \times 9=$ |  |
| 6. | $2 \times 0.03=$ | 28. | $0.5 \times 9=$ |  |
| 7. | $3 \times 3=$ | 29. | $0.5 \times 0.9=$ |  |
| 8. | $3 \times 0.3=$ | 30. | $5 \times 0.09=$ |  |
| 9. | $3 \times 0.03=$ | 31. | $9 \times 0.05=$ |  |
| 10. | $4 \times 3=$ | 32. | $2 \times 6=$ |  |
| 11. | $4 \times 0.3=$ | 33. | $7 \times 0.2=$ |  |
| 12. | $4 \times 0.03=$ | 34. | $3 \times 8=$ |  |
| 13. | $9 \times 2=$ | 35. | $9 \times 0.03=$ |  |
| 14. | $9 \times 0.2=$ | 36. | $4 \times 8=$ |  |
| 15. | $9 \times 0.02=$ | 37. | $0.7 \times 6=$ |  |
| 16. | $5 \times 3=$ | 38. | $0.6 \times 0.6=$ |  |
| 17. | $5 \times 0.3=$ | 39. | $0.6 \times 0.8=$ |  |
| 18. | $0.5 \times 3=$ | 40. | $0.6 \times 0.9=$ |  |
| 19. | $0.5 \times 0.3=$ | 41. | $8 \times 0.6=$ |  |
| 20. | $5 \times 0.03=$ | 42. | $0.9 \times 0.7=$ |  |
| 21. | $3 \times 0.05=$ | 43. | $0.7 \times 0.7=$ |  |
| 22. | $8 \times 2=$ | 44. | $0.8 \times 0.9=$ |  |

Name
Date $\qquad$

It is said that the true measure of knowing something is being able to teach it to someone else. Who can you teach these terms to this summer? How will you teach these terms to your summer student?

| A quadrilateral with two pairs of equal sides that are also adjacent. | An angle that turns through $\frac{1}{360}$ of a circle. | A quadrilateral with exactly one pair of parallel sides. | A closed figure made up of line segments. |
| :---: | :---: | :---: | :---: |
| Measurement of space or capacity. | A quadrilateral with opposite sides that are parallel. | An angle measuring 90 degrees. | The union of two different rays sharing a common vertex. |
| The number of square units that cover a twodimensional shape. | Two lines in a plane that do not intersect. | The number of adjacent layers of the base that form a rectangular prism. | A three-dimensional figure with six square sides. |
| A quadrilateral with four 90-degree angles. | A polygon with 4 sides and 4 angles. | A parallelogram with all equal sides. | Cubes of the same size used for measuring. |
| Two intersecting lines that form 90-degree angles. | A three-dimensional figure with six rectangular sides. | A three-dimensional figure. | Any flat surface of a 3-D figure. |
| A line that cuts a line segment into two equal parts at 90 degrees. | Squares of the same size, used for measuring. | A rectangular prism with only 90-degree angles. | One face of a 3-D solid, often thought of as the surface upon which the solid rests. |

[^0]| Base | Volume of a Solid | Cubic Units | Kite |
| :---: | :---: | :---: | :---: |
| Height | One-Degree Angle | Face | Trapezoid |
| Right Rectangular Prism | Perpendicular Bisector | Cube | Area |
| Perpendicular Lines | Rhombus | Parallel Lines | Angle |
| Polygon | Rectangular Prism | Parallelogram | Rectangle |
| Right Angle | Quadrilateral | Solid Figure | Square Units |

## geometry terms

## Math Picture Game:

Number of players: 4-8
Materials: Blank paper, timer, pencils

- Players divide into two teams. The vocabulary term cards are placed facedown in a pile.
- A player from Team A chooses a card, silently reads the card, and draws a picture to represent the term on the card.
- As soon as the player silently reads the card, Team B starts the 30 -second timer.
- Team A players use the drawing to figure out the term before the timer sounds.
- If the members of Team A correctly guess the term, they score a point for their team.
- However, the first wrong guess from Team A passes the play to Team B. Team B then draws a picture to steal the point from Team A.
- Play continues with teams taking turns drawing until all the cards have been used. The team with the most points wins.


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[^1]
## Lesson 30

Name
Date $\qquad$

Playing math games can be a fun way to practice math skills. How will you use the games to retain these terms over the summer? Who will play with you? How can you change the games to play alone? How often will you play the games?

## Attribute Buzz:

Number of players: 2
Description: Players place geometry terms cards facedown in a pile and, as they select cards, name the attributes of each figure within 1 minute.

- Player A flips the first card and says as many attributes as possible within 30 seconds.
- Player B says, "Buzz," when or if Player A states an incorrect attribute or time is up.
- Player B explains why the attribute is incorrect (if applicable) and can then start listing attributes about the figure for 30 seconds.
- Players score a point for each correct attribute.
- Play continues until students have exhausted the figure's attributes. A new card is selected, and play continues. The player with the most points at the end of the game wins.


## Three Questions to Guess My Term!

Number of players: 2-4
Description: A player selects and secretly views a term card. Other players take turns asking yes or no questions about the term.

- Players can keep track of what they know about the term on paper.
- Only yes or no questions are allowed. ("What kind of angles do you have?" is not allowed.)
- A final guess must be made after 3 questions but may be made sooner. Once a player says, "This is my guess," no more questions may be asked by that player.
- If the term is guessed correctly after 1 or 2 questions, 2 points are earned. If all 3 questions are used, only 1 point is earned.
- If no player guesses correctly, the card holder receives the point.
- The game continues as the player to the card holder's left selects a new card and questioning begins again.
- The game ends when a player reaches a predetermined score.


## Concentration:

Number of players: 2-6
Description: Players persevere to match term cards with their definition and description cards.

- Create two identical arrays side by side: one of term cards and one of definition and description cards.
- Players take turns flipping over pairs of cards to find a match. A match is a vocabulary term and its definition or description card. Cards keep their precise location in the array if not matched. Remaining cards are not reconfigured into a new array.
- After all cards are matched, the player with the most pairs is the winner.


## Bingo:

Number of players: at least 4-whole class
Description: Players match definitions to terms to be the first to fill a row, column, or diagonal.

- Players write a geometry term in each box of the math bingo card. Each term should be used only once. The box that says Math Bingo! is a free space.
- Players place the filled-in math bingo template in their personal white boards.
- One person is the caller and reads the definition from a geometry definition card.
- Players cross off or cover the term that matches the definition.
- "Bingo!" is called when 5 vocabulary terms in a row are crossed off diagonally, vertically, or horizontally. The free space counts as 1 box toward the needed 5 vocabulary terms.
- The first player to have 5 in a row reads each crossed-off word, states the definition, and gives a description or an example of each word. If all words are reasonably explained as determined by the caller, the player is declared the winner.
game directions

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  | Math <br> BINGO |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  | Math <br> BINGO |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

bingo card

## Lesson 31

$\qquad$
Today, when we saw a video on the Fibonacci sequence in the spiral and in nature, it may have felt a bit like "math magic." Have you ever felt math magic in your elementary school years? If so, when did you experience it? If not, did you experience it today? Explain.

## Lesson 32

Name $\qquad$ Date $\qquad$

Today, we watched how savings can grow over time, but we did not discuss how the money saved was earned. Have you ever thought about how math skills might help you to earn money? If so, what are some jobs that might require strong math skills? If not, think about it now. How might you make a living using math skills?

## Lesson 33

$\qquad$
Today, you made a box for a special purpose. It shows one way that math is used all the time to create containers. When might there be other opportunities for you to use the math you have learned in elementary school?

## Lesson 34

Name
Date

What are you most looking forward to learning about in Grade 6 or in math in your future?


[^0]:    geometry definitions

[^1]:    math picture game directions

