

Please show all work on either these pages or on loose leaf. Staple everything together when complete. This is due the first day of school.

Circle the best answer.

1. Simplify.

$$\frac{15(-3)}{5 - (-10)}$$

- A. -9 B. -3
 C. 3 D. 9

6. Solve. *draw answer on a number line.*

$$-31 < g + 2$$

- F. $-33 > g$ G. $-33 < g$
 H. $-29 < g$ J. $-29 > g$

2. Simplify.

$$2^2 + (-8) \div 4$$

- F. 0 G. -1
 H. 2 J. 6

7. Solve.

$$\frac{b}{-2} \geq -8$$

- A. $b \geq 4$ B. $b \leq -4$
 C. $b \geq 16$ D. $b \leq 16$

3. Solve.

$$y - 20 = -60$$

- A. $y = 80$
 B. $y = 40$
 C. $y = 3$
 D. $y = -40$

8. Which number is equivalent to $\frac{1}{5}$?

- F. 5
 G. 0.5
 H. 0.2
 J. 0.1

4. Solve.

$$\frac{m}{10} = -12$$

- F. $m = -120$
 G. $m = -2$
 H. $m = -1.2$
 J. $m = 120$

~~Simplify.~~

~~$$\frac{1}{3} \cdot 3^{-1}$$~~

- A. -1
 B. $\frac{1}{9}$
 C. $\frac{1}{6}$
 D. 1

5. Given $A = \ell w$, what is the area of a rectangle with a length of 12 feet and a width of 10 feet?

- A. 2 ft^2
 B. 44 ft^2
 C. 120 ft^2
 D. 1200 ft^2

10. Solve.

$$63 = 8x - 9$$

- F. $x = 16.875$
 G. $x = 9$
 H. $x = 6.75$
 J. $x = -9$

11. Simplify.

$$\frac{3}{4} - \left(\frac{2}{3} + \frac{1}{6}\right)$$

- A. 0
- B. $\frac{2}{7}$
- C. $\frac{1}{4}$
- D. $-\frac{1}{12}$

16. The scale on a map is 1 inch = 31.5 miles. What is the actual distance if the map distance is 3.5 inches?

- F. 9 mi
- G. 90 mi
- H. 110.25 mi
- J. not given

12. Simplify.

$$\frac{1}{8} + 3\left(-\frac{3}{4}\right)$$

- F. $2\frac{3}{8}$
- G. $-\frac{2}{3}$
- H. $-2\frac{1}{8}$
- J. $-2\frac{11}{32}$

17. Lilly sold 43 of her 58 boxes of cookies. About what percent of her boxes were sold?

- A. 0.74%
- B. 0.26%
- C. 26%
- D. 74%

13. Solve.

$$1\frac{1}{9}y = 10$$

- A. $y = 11\frac{1}{9}$
- B. $y = 9$
- C. $y = 8\frac{8}{9}$
- D. $y = \frac{1}{9}$

18. What is the percent of increase from 32 to 40?

- F. 20%
- G. 25%
- H. 80%
- J. 120%

14. It rained 12 days out of 30 days. Which ratio compares the number of rainy days to the number of dry days?

- F. $\frac{2}{5}$
- G. 18 : 12
- H. 12 : 30
- J. 2 : 3

19. The top five scores on the math test were 94, 100, 101, 90, and 90. What is the mean of this data?

- A. 95
- B. 94
- C. 90
- D. There is no mean.

15. Solve.

$$\frac{x}{76} = \frac{15}{19}$$

- A. $x = 1140$
- B. $x = 96.27$
- C. $x = 60$
- D. $x = 0.27$

20. Which best describes the purpose of a bar graph?

- F. to display changes in data over time
- G. to compare two or more sets of data
- H. to represent how a whole is divided into parts
- J. to show results of a survey

Simplify.

1. $8(-3) + 14$

2. $3^2 - 2(-2) + 1$

~~3. $2 - 2$~~

Solve. If an inequality, draw your answer on a number line.

4. $-9x = 72$

5. $40 = \frac{x}{2}$

6. $c - 10 \geq 15$

7. $-45 < 9y$

8. $15x + 16 = -29$

9. $18 = -3y - 12$

Write each as a decimal.

10. $\frac{40}{100}$

11. $-\frac{3}{5}$

12. $2\frac{1}{8}$

Compute.

13. $\frac{3}{10} + \frac{3}{5} - \frac{1}{5}$

14. $1\frac{1}{4} \div \frac{1}{3}$

15. $3(2\frac{1}{2} - 1) + \frac{3}{10}$

Solve for x.

16. $3\frac{1}{3}x = 29$

17. $15 = \frac{20}{31}x$

Use the following information for questions 18 and 19.

Connor makes \$120 for every 10 hours he works.

18. How much does Connor make per hour?

19. If Connor earns \$300, how many hours has he worked?

Solve.

20. What is 9% of 25?

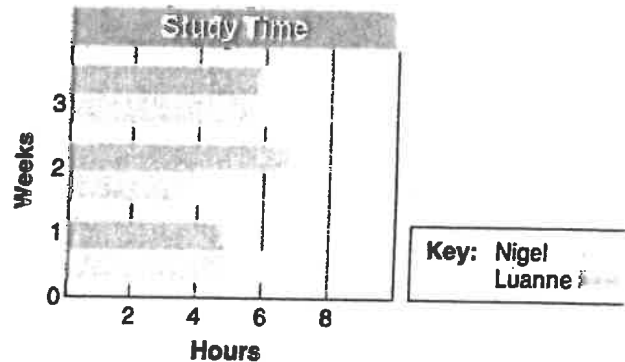
21. What is the percent of decrease from 125 to 25?

22. Sales tax is 10.25%. What is the tax on a \$300 bill?

Use the graph to answer questions 23 and 24.

23. During which week did Nigel study more than Luanne? How much more?

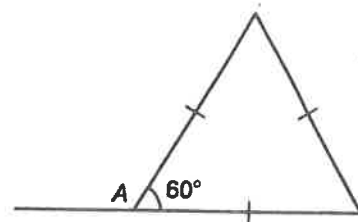
24. Over the three weeks, how many hours did Nigel study in all? Luanne?



Use the diagram for questions 25 and 26.

25. What is $m\angle A$?

26. Classify the triangle by its angles and sides.



Solve. Show your work.

48. Ms. Costello borrows \$5000 from a bank that charges 9.25% interest per year. What is her total amount due after one year?

~~49.~~ The 8th grade sells popcorn after school. The 2-cup container is \$0.89, the $2\frac{1}{2}$ -cup container is \$1.10, and the $3\frac{1}{2}$ -cup container is \$1.75. Which is the best buy?

50. The sweater Ingrid wants to buy is \$30. It is on sale for 33% off. If the sales tax is 7%, what is the total cost of the sweater? Round to the nearest cent, if necessary.

51. Six friends play golf. Their scores are 87, 95, 92, 88, 91, and 96. What is the mean, median, and mode of the friends' scores?

22. A right triangle contains an angle with a measure of 32° . What is the measure of the third angle?

F. 58°

G. 74°

H. 148°

J. not given

29. Evaluate $ac + 2b - 21$ when $a = -3$, $b = 12$, and $c = 1$.

A. -42

B. 0

C. 7

D. 41

33. Jorge tips the waiter 20%. If the bill, before tip, comes to \$25.50, what does Jorge pay including tip?

A. \$0.51

B. \$5.10

C. \$26.01

D. \$30.60

40. It costs \$3.50 per hour to rent a bike, plus a flat fee of \$5.50. If Juanita spends a total of \$40.50, for how many hours did she rent the bike?

F. $4\frac{1}{2}$ h

G. 7 h

H. 10 h

J. 12 h

Solve.

45. $-7(2z + 4) = 21$

46. $9x - 5 = 16 + 2x$

47. $-8(7 - 4n) - 2n = 16 + 12n$

Integer Operations Timed Practice

Dear Students,

Please log your time for the completion of each of the worksheets for the 30 problems. Feel Free to make extra copies and/or visit the website www.math-drills.com and search for "All Operations with Integers" for more practice. Practice really does make perfect!

Worksheet	Goal	Time

All Operations with Integers

Use an integer strategy to find each answer.

$$\begin{array}{ll} 6 \div 2 = & (-1) + 9 = \\ (-8) + 2 = & (-88) \div (-11) = \\ (-10) - (-7) = & 5 + (-8) = \\ (-2) + (-4) = & (-11) + (-9) = \\ (-12) + 7 = & 6 \times 9 = \\ 9 - 11 = & 8 \times (-10) = \\ 12 \times (-6) = & (-11) + 4 = \\ 4 - 5 = & 11 \div 11 = \\ 24 \div (-4) = & 3 + 11 = \\ 9 \times 9 = & 7 \times 6 = \end{array}$$

All Operations with Integers

Use an integer strategy to find each answer.

$$\begin{array}{ll} (-45) \div (-5) = & 4 - (-4) = \\ (-8) \div (-2) = & (-110) \div (-11) = \\ (-5) - (-5) = & (-12) + (-1) = \\ (-80) \div (-8) = & 5 + 9 = \\ 10 - 2 = & 4 - 11 = \\ 28 \div (-4) = & (-132) \div (-12) = \\ 1 \times 3 = & (-3) + 3 = \\ 4 \div 1 = & 10 \times (-4) = \\ (-8) - (-8) = & 12 \times 8 = \\ (-3) \times (-3) = & (-24) \div 4 = \end{array}$$

All Operations with Integers

Use an integer strategy to find each answer.

$7 \times 9 = \quad (-11) + (-1) = \quad 8 \times (-2) =$

$(-2) \times 10 = \quad 80 \div 10 = \quad 1 \times 12 =$

$5 + (-10) = \quad (-88) \div 8 = \quad 4 + (-1) =$

$5 - 4 = \quad 36 \div (-9) = \quad 8 \times (-5) =$

$10 \div (-1) = \quad 8 \times 4 = \quad 25 \div 5 =$

$6 + 6 = \quad 1 + (-1) = \quad 96 \div 8 =$

$(-4) - (-9) = \quad (-11) \times (-11) = \quad (-108) \div 12 =$

$(-3) \times 8 = \quad (-7) \times 3 = \quad (-7) \times (-5) =$

$(-7) - (-6) = \quad 1 - (-5) = \quad (-9) + 7 =$

$9 - (-1) = \quad 3 - 11 = \quad 3 + 6 =$

All Operations with Integers

Use an integer strategy to find each answer.

$8 + 10 = \quad 10 + 9 = \quad 2 - 5 =$

$7 + (-8) = \quad 16 \div (-4) = \quad 9 - (-11) =$

$7 + 6 = \quad 8 \times (-10) = \quad 4 - (-6) =$

$(-3) + 11 = \quad (-2) + 5 = \quad 20 \div (-2) =$

$(-8) \times 4 = \quad (-9) \times 6 = \quad (-1) \times (-10) =$

$3 + (-11) = \quad 1 \times (-7) = \quad 1 - (-9) =$

$(-8) \times (-4) = \quad (-7) \times (-3) = \quad 8 + (-2) =$

$35 \div 5 = \quad 7 - 6 = \quad 5 - (-3) =$

$(-7) - 7 = \quad 9 - 8 = \quad 3 - (-6) =$

$2 \times 8 = \quad 4 - 10 = \quad (-11) + 4 =$

All Operations with Integers

Use an integer strategy to find each answer.

$(-11) + 9 =$	$(-4) + 2 =$	$(-18) \div (-9) =$
$(-6) - (-7) =$	$(-3) \times (-7) =$	$12 \times 7 =$
$7 \times 1 =$	$4 \times (-8) =$	$4 \times (-4) =$
$8 + (-12) =$	$(-12) \times (-8) =$	$40 \div (-8) =$
$42 \div 6 =$	$3 + 8 =$	$(-4) + 3 =$
$(-5) \times (-2) =$	$(-42) \div 7 =$	$(-6) - 5 =$
$3 \times (-4) =$	$(-45) \div (-5) =$	$10 \times (-10) =$
$(-7) - 11 =$	$20 \div 4 =$	$11 - 8 =$
$40 \div 5 =$	$(-1) + (-10) =$	$16 \div 2 =$
$60 \div 5 =$	$(-2) \div 1 =$	$(-100) \div (-10) =$

All Operations with Integers

Use an integer strategy to find each answer.

$(-9) \times 2 =$	$(-12) + (-9) =$	$(-9) + 12 =$
$(-2) - (-8) =$	$4 \times 7 =$	$11 \times 8 =$
$6 - (-4) =$	$9 - 10 =$	$5 - (-10) =$
$6 \times 3 =$	$(-12) - (-1) =$	$2 - (-7) =$
$(-72) \div 6 =$	$(-9) \div (-3) =$	$9 - 2 =$
$9 - (-5) =$	$(-108) \div (-9) =$	$(-4) \times (-8) =$
$20 \div (-4) =$	$7 - 10 =$	$8 \times 4 =$
$(-6) - (-11) =$	$27 \div 9 =$	$11 + 1 =$
$9 - 10 =$	$10 - 2 =$	$1 + 3 =$
$(-6) \times 11 =$	$(-1) \times 6 =$	$4 - 11 =$

