

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Solve the problem. Round to the nearest hundredth, if necessary.

1) 60% of what number is 78?

A) 130

B) 46.8

C) 13

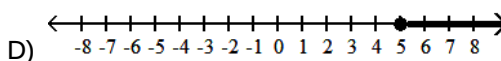
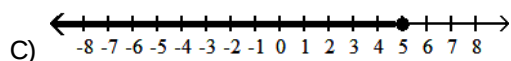
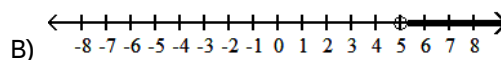
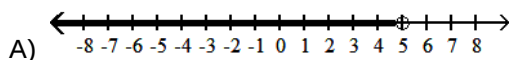
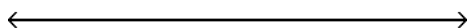
D) 1300

1) _____

Graph the inequality.

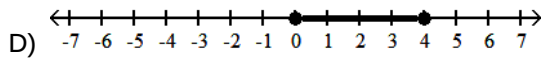
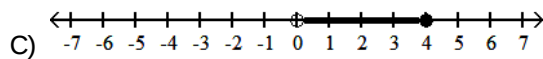
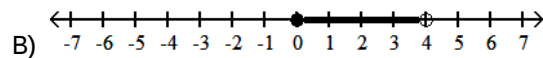
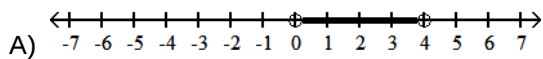
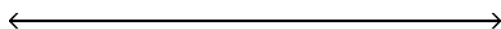
2) $x > 5$

2) _____



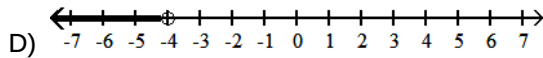
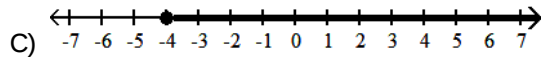
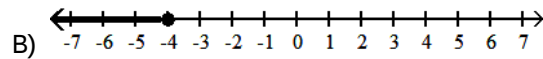
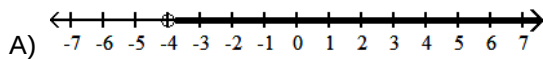
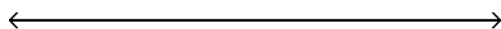
3) $0 < x < 4$

3) _____



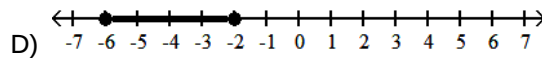
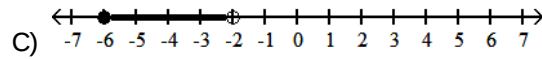
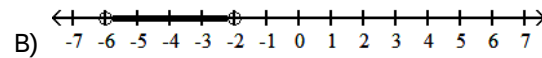
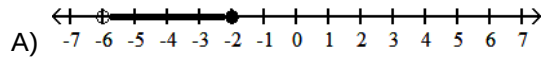
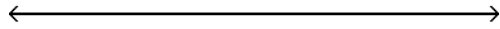
4) $x \leq -4$

4) _____



5) $-6 \leq x \leq -2$

5) _____



Solve.

6) $V = \frac{1}{3}Bh$ for h

6) _____

A) $h = \frac{B}{3V}$

B) $h = \frac{3B}{V}$

C) $h = \frac{V}{3B}$

D) $h = \frac{3V}{B}$

7) $x = \frac{w + y + z}{8}$ for y

7) _____

A) $y = 8x - 8w - 8z$

B) $y = 8x + w + z$

C) $y = x - w - z - 8$

D) $y = 8x - w - z$

Decide if the given number is a solution to the given equation.

8) $3m + 8 = 19$; 3

8) _____

A) No

B) Yes

Solve using the addition and multiplication principles.

9) $11z - 4 \geq 12z + 4$

9) _____

A) $\{z \mid z > 11\}$

B) $\{z \mid z \leq 11\}$

C) $\{z \mid z \geq 8\}$

D) $\{z \mid z \leq -8\}$

Solve the equation.

10) $\frac{1}{3}(12x - 15) = \frac{1}{4}(20x - 16)$

10) _____

A) $\frac{1}{20}$

B) 1

C) -1

D) -20

11) $9x - (3x - 1) = 2$

11) _____

A) $\frac{1}{12}$

B) $-\frac{1}{6}$

C) $-\frac{1}{12}$

D) $\frac{1}{6}$

12) $x + \frac{1}{11}x = 36$

12) _____

A) 11

B) 32

C) 34

D) 33

Solve the problem.

13) A high school graduating class is made up of 501 students. There are 149 more girls than boys. 13) _____
How many boys are in the class?

- A) 501 boys B) 149 boys C) 176 boys D) 325 boys

14) Jennifer's annual salary increased from \$29,000 to \$43,000 over the last five years. Find the percent increase in her salary during this time period. Round to the nearest tenth of a percent. 14) _____

- A) 4.8% B) 32.6% C) 48.3% D) 0.5%

15) Andy left a 15% tip for a meal that cost \$30. What was the total cost of the meal including the tip? 15) _____

- A) \$4.50 B) \$39.00 C) \$34.50 D) \$25.50

Solve the problem. Round to the nearest hundredth, if necessary.

16) What number is 4000% of 233? 16) _____

- A) 932 B) 93,200 C) 932,000 D) 9320

Solve the problem.

17) Recently, the cost of 14 6-oz jars of baby food was \$8.96. What was the cost of one jar? 17) _____

- A) \$0.32 B) \$0.64 C) \$1.92 D) \$1.28

Solve the equation using the addition principle.

18) $25 = m - 27$ 18) _____

- A) -52 B) 52 C) 2 D) -2

19) $h + \frac{1}{3} = \frac{2}{3}$ 19) _____

- A) $\frac{7}{12}$ B) 1 C) $\frac{1}{3}$ D) 4

Solve. Clear fractions or decimals first.

20) $\frac{1}{3}p - \frac{3}{8}p = 5$ 20) _____

- A) 120 B) -24 C) 24 D) -120

Solve using the multiplication principle.

21) $-4x < -12$ 21) _____

- A) $\{x \mid x > 3\}$ B) $\{x \mid x > -3\}$ C) $\{x \mid x < 3\}$ D) $\{x \mid x < -3\}$

Translate the sentence to an algebraic inequality.

22) The cost is no more than \$521.35. 22) _____

- A) $x < 521.35$ B) $x > 521.35$ C) $x \leq 521.35$ D) $x \geq 521.35$