

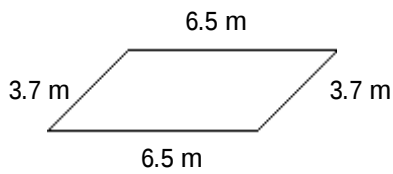
SUMMER 1 2016 MATH 0409_ REVIEW EXAM 1

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

Find the perimeter of the polygon.

1)

1) _____



A) 20.4 m

B) 13.9 m

C) 16.7 m

D) 10.2 m

2) A rectangle measuring 9 cm by 12 cm

2) _____

A) 36 cm

B) 21 cm

C) 42 cm

D) 6 cm

Solve the problem.

3) What will it cost to buy ceiling molding to go around a rectangular room with length 18 feet and width 8 feet? The molding costs \$2.00 per linear foot.

3) _____

A) \$32.00

B) \$72.00

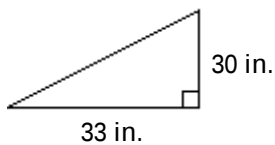
C) \$104.00

D) \$52.00

Find the area.

4)

4) _____



A) 247.5 in.²

B) 495 in.²

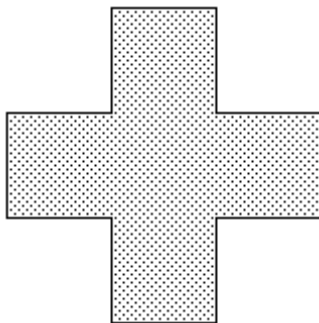
C) 450 in.²

D) 990 in.²

Find the area of the shaded region.

5)

5) _____



Each side 14 ft

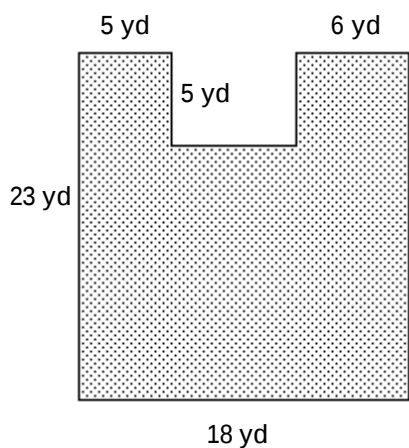
A) 168 ft²

B) 784 ft²

C) 980 ft²

D) 588 ft²

6)



6) _____

A) 384 yd^2

B) 74 yd^2

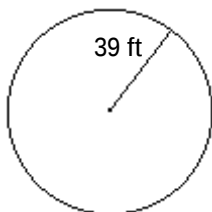
C) 389 yd^2

D) 379 yd^2

Find the radius or diameter as requested.

7) Find the diameter.

7) _____



A) 122.46 ft

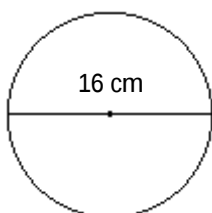
B) 4775.94 ft

C) 78 ft

D) 19.5 ft

Find the circumference of the circle. Use 3.14 or $\frac{22}{7}$ for π as indicated.8) Use 3.14 for π .

8) _____



A) 25.12 cm

B) 100.48 cm

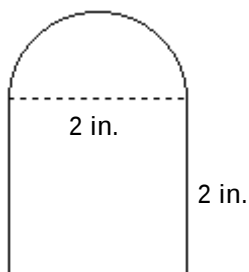
C) 200.96 cm

D) 50.24 cm

Find the perimeter. Use 3.14 for π .

9)

9) _____



A) 9.14 in.

B) 11.14 in.

C) 14.28 in.

D) 12.28 in.

Evaluate.

10) $\frac{9m}{n}$, when $m = 9$ and $n = 3$

10) _____

A) 54

B) 3

C) 27

D) 9

Translate the phrase to an algebraic expression.

11) Eight more than x

11) _____

A) $\frac{8}{x}$

B) $8 - x$

C) $8x$

D) $x + 8$

12) x subtracted from y

12) _____

A) $x - y$

B) $\frac{x}{y}$

C) $\frac{y}{x}$

D) $y - x$

Convert to decimal notation.

13) $\frac{17}{4}$

13) _____

A) 4.25

B) 12.75

C) -4.25

D) 8.5

Write a true sentence using either $<$ or $>$.

14) -8 -7

14) _____

A) $-8 < -7$

B) $-8 > -7$

15) -46 -67

15) _____

A) $-46 > -67$

B) $-46 < -67$

Determine whether the statement is true or false.

16) $13 \leq 11 - 3$

16) _____

A) True

B) False

Find the absolute value.

17) $|-22|$

17) _____

A) 0

B) -22

C) 44

D) 22

Add.

18) $-20 + 7 + (-11)$

18) _____

A) 16

B) 38

C) -24

D) -2

Find the opposite, or additive inverse.

19) 28.7

19) _____

A) $\frac{1}{28.7}$

B) 0

C) -28.7

D) 28.7

Evaluate $-x$ for the given value of x .

20) $x = 32.7$

20) _____

A) 32

B) -32.7

C) $\frac{10}{327}$

D) 32.7

Solve the problem.

21) The stock market gained 6 points on Tuesday and lost 58 points on Wednesday. It had closed on Monday at 2648 points. Where did the market close on Wednesday?

21) _____

A) 2700 points

B) 2712 points

C) 2596 points

D) 2584 points

Subtract.

22) $-14 - (-9)$

22) _____

A) -5

B) -23

C) 5

D) 23

23) $-11 - 13$

23) _____

A) -24

B) -2

C) 2

D) 24

24) $-\frac{3}{4} - \frac{5}{8}$

24) _____

A) $\frac{11}{8}$

B) $-\frac{1}{4}$

C) $-\frac{11}{8}$

D) -1

Simplify.

25) $13 + (-8) - 5 - (-16) + 6$

25) _____

A) 4

B) 0

C) -10

D) 22

Solve the problem.

26) The temperature at the South pole was 33° at 8 am. At 3 pm, it was -5° . By how many degrees did the temperature drop?

26) _____

A) -38°

B) 28°

C) 38°

D) -28°

Multiply.

27) $-16 \cdot (-15)$

27) _____

A) 255

B) 240

C) -256

D) 256

28) $-\frac{8}{3} \cdot \left(-\frac{3}{7}\right)$

28) _____

A) $\frac{8}{7}$

B) $\frac{12}{5}$

C) $-\frac{11}{10}$

D) $-\frac{11}{21}$

29) $-\frac{5}{6} \cdot \frac{4}{5}$

29) _____

A) $-\frac{40}{48}$

B) $\frac{2}{3}$

C) $\frac{12}{20}$

D) $-\frac{2}{3}$

30) $\left(-\frac{1}{8}\right) \cdot \left(\frac{1}{12}\right) \cdot \left(-\frac{3}{7}\right)$

30) _____

A) $-\frac{1}{224}$

B) $\frac{1}{224}$

C) $-\frac{1}{384}$

D) $\frac{1}{384}$

Evaluate the expression for the given value of x.

31) $5x^2$, $x = -6$

31) _____

A) -180

B) 180

C) 900

D) 60

Solve the problem.

- 32) A population of a rural town was 15,500. It decreased 330 each year for 5 yr. What was the population of the town after 5 yr?

A) 14,180

B) 13,520

C) 13,850

D) 17,150

32) _____

Divide, if possible.

33) $\frac{60}{-3}$

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

B) -30

C) -20

D) 20

33) _____

34) $-180 \div (-6)$

A) 30

B) -30

C) $\frac{1}{30}$

D) 20

34) _____

35) $\frac{-46}{0}$

A) 46

B) 0

C) Not defined

D) 1

35) _____

36) $\frac{0}{-27}$

A) Not defined

B) 27

C) 1

D) 0

36) _____

Find the reciprocal, if it exists.

37) $-\frac{6}{5}$

A) $\frac{6}{5}$

B) $-\frac{5}{6}$

C) $\frac{5}{6}$

D) 1

37) _____

Divide.

38) $\frac{2}{3} \div \left(-\frac{1}{2}\right)$

A) $-\frac{4}{3}$

B) $\frac{4}{3}$

C) $\frac{3}{4}$

D) $-\frac{1}{3}$

38) _____

39) $\frac{-18}{-3 - (-1)}$

A) 5

B) -5

C) -9

D) 9

39) _____

Solve the problem.

- 40) In Smithville, there were 229 teachers in 1990 and 315 teachers in 2000. Find the percent of increase in the number of teachers in Smithville during this time period. Round to the nearest tenth of a percent.

A) 45.1%

B) 37.6%

C) 41.3%

D) 27.3%

40) _____

Find an equivalent expression with the given denominator.

41) $\frac{5}{6}$; $12x$

41) _____

A) $\frac{10x}{12x}$

B) $\frac{5x}{12x}$

C) $\frac{10}{12x}$

D) $\frac{11x}{12x}$

Simplify.

42) $\frac{65xy}{39xy}$

42) _____

A) $-\frac{5xy}{3}$

B) $\frac{5xy}{3}$

C) $-\frac{5}{3}$

D) $\frac{5}{3}$

Multiply.

43) $5(a + b)$

43) _____

A) $5ab$

B) $10ab$

C) $5a + 5b$

D) $5a + b$

List the terms of the expression.

44) $-4 + 5a - 8b - 5ab$

44) _____

A) $-4, 5a, 8b, 5ab$

B) $-4, 5a, -8b, -5ab$

C) $-4, 5a, -8b, -5, ab$

D) $-4, -5a, -8b, -5ab$

Collect like terms.

45) $7q - 4 - 7p + 5q - 4p$

45) _____

A) $12q + 11p + 4$

B) $12q - 11p - 4$

C) $7q - 11p - 9$

D) $12q - 7p - 4$

Remove parentheses and simplify.

46) $9x - (7 - 4x)$

46) _____

A) $13x + 7$

B) $13x - 7$

C) $9x - 11$

D) $5x - 7$

Simplify.

47) $3\{[6(x - 1) + 5] - [2(3x - 1) + 5]\}$

47) _____

A) $12x - 4$

B) $36x - 12$

C) 0

D) -12

48) $\frac{8 - 4^2}{7^2 + 6^2}$

48) _____

A) $-\frac{8}{13}$

B) $\frac{16}{85}$

C) $\frac{4}{13}$

D) $-\frac{8}{85}$

49) $\frac{12 - 7^2}{9^2 + 3^2}$

49) _____

A) $-\frac{37}{12}$

B) $\frac{5}{18}$

C) $-\frac{37}{90}$

D) $\frac{5}{12}$