

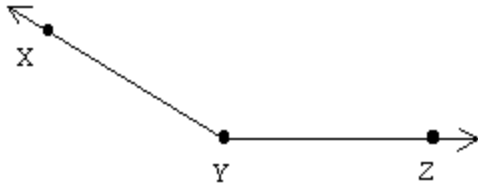
FALL 2013 MATH 0308 REVIEW EXAM 1

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

Name the angle in five different ways.

1)

1) _____

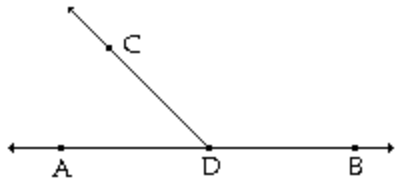


- A) Angle ZYX, angle XZY, $\angle XYZ$, $\angle ZYX$, or $\angle Y$
- B) Angle ZYX, angle XYZ, $\angle Y$, $\angle ZXY$, or angle ZYX
- C) Angle XYZ, angle ZYX, angle ZYX, $\angle XYZ$, or $\angle Y$
- D) Angle ZYX, $\angle XYZ$, $\angle ZYX$, $\angle XZY$, or $\angle Y$

Tell whether the angle is acute, right, obtuse, or straight.

2) $\angle ADB$

2) _____

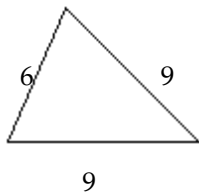


- A) Acute
- B) Straight
- C) Obtuse
- D) Right

Classify the triangle as equilateral, isosceles, or scalene. Then classify it as right, obtuse, or acute.

3)

3) _____



- A) Isosceles; right
- B) Isosceles; acute
- C) Equilateral; acute
- D) Equilateral; right

Find the sum of the angle measures of the specified polygon.

4) An octagon.

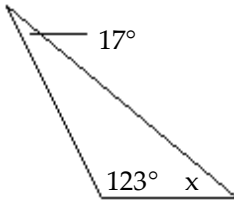
4) _____

- A) 900°
- B) 1080°
- C) 720°
- D) 1440°

Find the missing angle measure.

5)

5) _____



A) 106°

B) 140°

C) 45°

D) 40°

Solve the problem.

6) 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.

6) _____

A) \$72.00

B) \$32.00

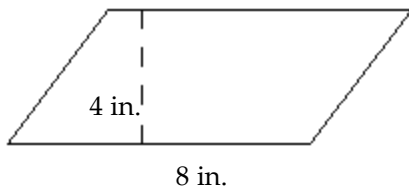
C) \$104.00

D) \$52.00

Find the area.

7)

7) _____



A) 16 in.^2

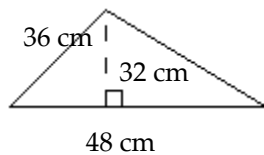
B) 12 in.^2

C) 64 in.^2

D) 32 in.^2

8)

8) _____



A) 576 cm^2

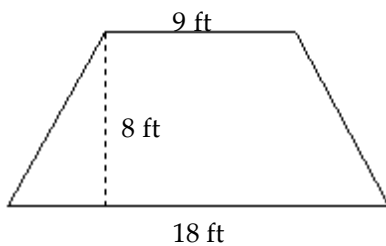
B) 768 cm^2

C) 1536 cm^2

D) 512 cm^2

9)

9) _____



A) 81 ft^2

B) 216 ft^2

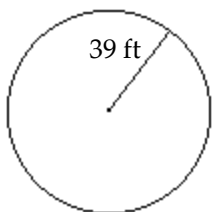
C) 35 ft^2

D) 108 ft^2

Find the radius or diameter as requested.

10) Find the diameter.

10) _____



A) 78 ft

B) 4775.94 ft

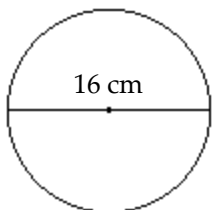
C) 122.46 ft

D) 19.5 ft

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

11) Use 3.14 for π .

11) _____



A) 200.96 cm

B) 100.48 cm

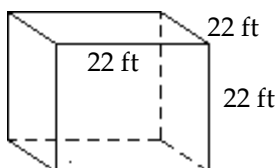
C) 25.12 cm

D) 50.24 cm

Find the volume.

12)

12) _____



A) 66 ft³

B) 10,648 ft³

C) 968 ft³

D) 484 ft³

Solve the problem.

13) Find the total surface area of a 3 ft by 4 ft by 3 ft box.

13) _____

A) 33 ft²

B) 66 ft²

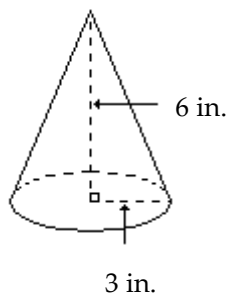
C) 72 ft²

D) 54 ft²

Find the volume of the circular cone. Use 3.14 or $\frac{22}{7}$ for π as indicated. Round to the nearest whole number if necessary.

14) Use 3.14 for π .

14) _____



A) 38 in.^3

B) 85 in.^3

C) 57 in.^3

D) 113 in.^3

Find the requested angle.

15) Complement of 50°

15) _____

A) 40°

B) 100°

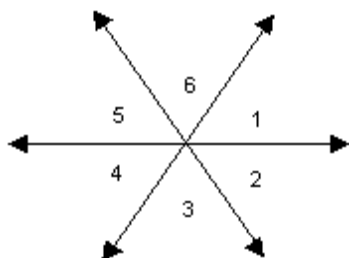
C) 310°

D) 130°

Use the vertical angle property to find the indicated angle measures.

16) In the figure, $m\angle 1 = 29^\circ$ and $m\angle 3 = 116^\circ$. Find $m\angle 2$, $m\angle 4$, $m\angle 5$, and $m\angle 6$.

16) _____



A) $m\angle 2 = 29^\circ$; $m\angle 4 = 29^\circ$; $m\angle 5 = 29^\circ$; $m\angle 6 = 116^\circ$

B) $m\angle 2 = 29^\circ$; $m\angle 4 = 35^\circ$; $m\angle 5 = 35^\circ$; $m\angle 6 = 116^\circ$

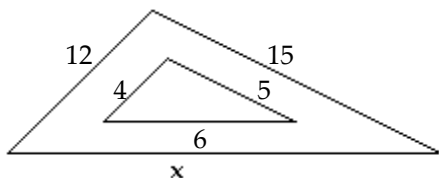
C) $m\angle 2 = 35^\circ$; $m\angle 4 = 35^\circ$; $m\angle 5 = 29^\circ$; $m\angle 6 = 116^\circ$

D) $m\angle 2 = 35^\circ$; $m\angle 4 = 29^\circ$; $m\angle 5 = 35^\circ$; $m\angle 6 = 116^\circ$

Assume that the given triangles are similar. Provide the missing length.

17)

17) _____



A) 6

B) 24

C) 18

D) 20

Evaluate.

18) $\frac{x+y}{9}$, when $x = 11$ and $y = 16$

18) _____

A) 4

B) 2

C) 1

D) 3

Translate the phrase to an algebraic expression.

19) x subtracted from y

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

B) $y - x$

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

D) $x - y$

19) _____

20) Three less than x

A) $x - 3$

B) $3 - x$

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

D) $3x$

20) _____

Convert to decimal notation.

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

A) -4.25

B) 8.5

C) 12.75

D) 4.25

21) _____

Write a true sentence using either < or >.

22) $-46 \underline{\hspace{0.5cm}} -67$

A) $-46 < -67$

B) $-46 > -67$

22) _____

23) $-77 \underline{\hspace{0.5cm}} -11$

A) $-77 < -11$

B) $-77 > -11$

23) _____

Find the absolute value.

24) $|-22|$

A) 22

B) 0

C) 44

D) -22

24) _____

Find the opposite, or additive inverse.

25) -25

A) 0

B) 25

C) -25

D) $\frac{1}{25}$

25) _____

26) $\frac{1}{4}$

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

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

C) -4

D) 4

26) _____

Add.

27) $-10 + (-8) + (-16) + (-10) + 4 + (-12)$

A) 0

B) -60

C) -52

D) -24

27) _____

Evaluate -x for the given value of x.

28) $x = -2.9$

A) $-\frac{1}{2.9}$

B) 0

C) 2.9

D) -2.9

28) _____

$$29) x = -\frac{1}{152}$$

29) _____

A) 0

B) $-\frac{1}{152}$

C) 152

D) $\frac{1}{152}$

Solve the problem.

30) 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?

30) _____

A) 2596 points

B) 2584 points

C) 2712 points

D) 2700 points

Subtract.

31) $-14 - (-9)$

31) _____

A) 23

B) -5

C) 5

D) -23

Simplify.

32) $13 + (-8) - 5 - (-16) + 6$

32) _____

A) 4

B) -10

C) 0

D) 22

Multiply.

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

33) _____

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

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

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

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

34) $-3 \cdot (-6) \cdot 12 \cdot (-8)$

34) _____

A) -5

B) 1728

C) -1728

D) 224

Evaluate the expression for the given value of x.

35) $(-5x)^2$, $x = 4$

35) _____

A) -400

B) -80

C) 80

D) 400

Solve the problem.

36) If a roll of wallpaper costs \$40, how much will 13 rolls cost?

36) _____

A) \$520

B) \$61

C) \$528

D) \$53

Find the reciprocal, if it exists.

37) -3

37) _____

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

B) 3

C) $\frac{1}{3}$

D) 1

Divide.

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

38) _____

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

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

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

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

Find an equivalent expression with the given denominator.

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

39) _____

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

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

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

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

Simplify.

40) $-\frac{32t}{24t}$

40) _____

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

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

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

D) $\frac{4t}{3}$

Write an equivalent expression. Use a commutative law.

41) $y + 2$

41) _____

A) $2 + y$

B) $2(y + 1)$

C) y^2

D) $2y$

Write an equivalent expression. Use an associative law.

42) $(x + 7) + y$

42) _____

A) $y + (x + 7)$

B) $x + (7 + y)$

C) $x(7 + y)$

D) $(7 + x) + y$

43) $9(ab)$

43) _____

A) $a(9b)$

B) $9a + 9b$

C) $(9a)b$

D) $9(ba)$

Multiply.

44) $8(5x + 5)$

44) _____

A) $40x + 5$

B) $200x$

C) $5x + 40$

D) $40x + 40$

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) $-9(4r + 7) + 8(3r + 4)$

46) _____

A) $-12r - 31$

B) $-5r - 2$

C) $-99r$

D) $-12r + 7$

Simplify.

47) $[5(x - 2) - 7] + [3(x - 1) + 3]$

47) _____

A) $8x - 17$

B) $8x - 7$

C) $8x - 9$

D) $5x - 20$

48) $28 + 26 \cdot 22 - (-13)$

48) _____

A) 89

B) 1201

C) 587

D) 613

Solve the problem.

49) 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?

49) _____

A) -38°

B) -28°

C) 38°

D) 28°

Translate the phrase to an algebraic expression.

50) The quotient of x divided by nine

A) $9 - x$

B) $9 + x$

C) $9x$

D) $\frac{x}{9}$

50) _____

Answer Key

Testname: FALL 2013 MATH 0308 REV EX 1

- 1) C
- 2) B
- 3) B
- 4) B
- 5) D
- 6) C
- 7) D
- 8) B
- 9) D
- 10) A
- 11) D
- 12) B
- 13) B
- 14) C
- 15) A
- 16) D
- 17) C
- 18) D
- 19) B
- 20) A
- 21) D
- 22) B
- 23) A
- 24) A
- 25) B
- 26) A
- 27) C
- 28) C
- 29) D
- 30) A
- 31) B
- 32) D
- 33) B
- 34) C
- 35) D
- 36) A
- 37) A
- 38) B
- 39) A
- 40) B
- 41) A
- 42) B
- 43) C
- 44) D
- 45) B
- 46) A
- 47) A
- 48) D

Answer Key

Testname: FALL 2013 MATH 0308 REV EX 1

49) C

50) D