Review Math

Name: _____   Div.: _____   Date: _____

| **Volume** = Area of Base x height	**Surface Area** = Sum of the Area of each face
Area Formulas	
Square = length x width	Triangle = base x height ÷ 2
Rectangle = length x width	Trapezoid = [(Base + Top) x Height] ÷ 2
Circle Formulas	
Area = πr^2	Circumference = $\pi 2r$ or πd

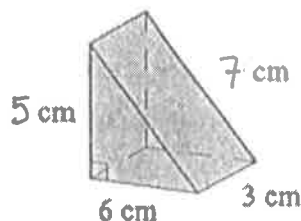1) Find the surface area and volume of the following shapes:

Surface Area: _____

Volume: _____

4 cm
5 cm
7 cm

Surface Area: _____

Volume: _____

6 cm
2 cm

Surface Area: _____

Volume: _____

7 cm
5 cm
6 cm
3 cm
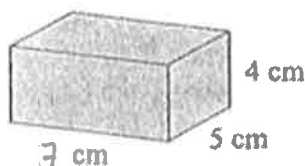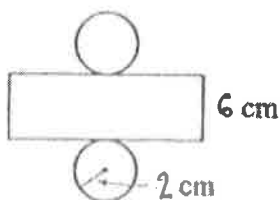
Solve using the given information:

2) The basement of a 20m by 19m house has a cement foundation poured to a thickness of 8cm. If the cement costs $68 per square meter, how much will the cement cost?

3) How much wall area will be covered in 6 revolutions of a paint roller that is 8cm wide and has a circumference of 3π?

Show all work!

Add.

4) $\frac{2}{5} + \frac{1}{5} =$

5) $\frac{4}{5} + \frac{2}{3} =$

6) $1\frac{1}{2} + 1\frac{3}{4} =$

7) $8/3 + 1\frac{1}{2} =$

Subtract.

8) $\frac{4}{5} - \frac{2}{5} =$

9) $1\frac{1}{2} - \frac{3}{4} =$

10) $\frac{7}{3} - \frac{2}{3} =$

11) $\frac{4}{5} - \frac{2}{3} =$

12) $1\ 1/3 - 2/3 =$

13) $12 - 1\ 8/11 =$

14) $3 \times \dfrac{1}{8} =$

15) $\dfrac{4}{3} \div 2 =$

16) $\dfrac{3}{7} \times \dfrac{1}{6} =$

17) $\dfrac{7}{8} \div \dfrac{4}{5} =$

18) $1 \dfrac{1}{3} \times 1 \dfrac{1}{2} =$

19) $1 \dfrac{1}{5} \times 1 \dfrac{1}{2} =$

20) $1 \dfrac{2}{3} \div 2 \dfrac{5}{6} =$

21) $4 \dfrac{1}{2} \div 1 \dfrac{1}{4} =$

22) Fill in the following table (fraction in lowest terms):

Fraction	Decimal	Percent
	0.2	
		0.35%
3/5		
		325%
	0.0005	
6/5		
	2.05	
3/8		

23) Find the number:
    a. 30% of 70

    c. 50% of 94

    b. 120% of 5

    d. 105% of 20

24) A watch is on sale for $120, which is 30% off its regular price. What does the watch regularly cost?

25) A camera normally costs $29.75, but is put on sale for 30% off.
    e. How much money are you saving?

    f. What is the Sale Price?

    g. What is the final price with 12% tax?

Solve for x (show your work).

26) $6 : x = 21 : 7$

27) $x : 15 = 10 : 25$

Find the Unit Rate (Show your work)

28) 650mL of juice shared among 5 people

29) $32 for 25 cups

Solve (show work where necessary):

30) $(+6) - (-8) =$

31) $(-4) - (+3) =$

32) $(-3) - (-5) + (-4) =$

33) $(+12) - (-4) - (+7) =$

34) $7 - 5 + 4 - 5 =$

35) $-7 - 5 + 4 + 5 =$

Find the Product/ Quotient (Show work where necessary):

36) $(-7)(-3)(-2) =$

37) $(+3)(+2)(-6) =$

38) $(-6) \div (+2) =$

39) $(-12) \div (-4) =$

Solve (Show all Work):

40) A map shows that Victoria is 5cm from Nanaimo. If the scale is 1: 4000000 how far is it from Victoria to Nanaimo in **km**?

41) Which is the better deal? $4.20 for 15 cans of Pepsi, or $3.35 for 12 cans?
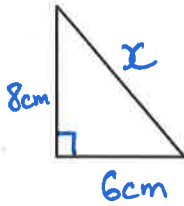
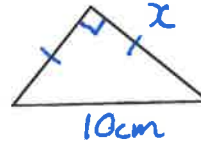Prime Factor and determine if it is a perfect square:

42) $\sqrt{324}$

43) $\sqrt{225}$

Find x

44)

8cm, 6cm, x

45)

x, 10cm

Write out the following in equation form:

46) Three less than two times a number is ten.

_____

47) Six more than a number divided by three is twelve.

_____

Evaluate (Show your work).

48) $2x = 5x - 6$

49) $4x - 8 = 2x$
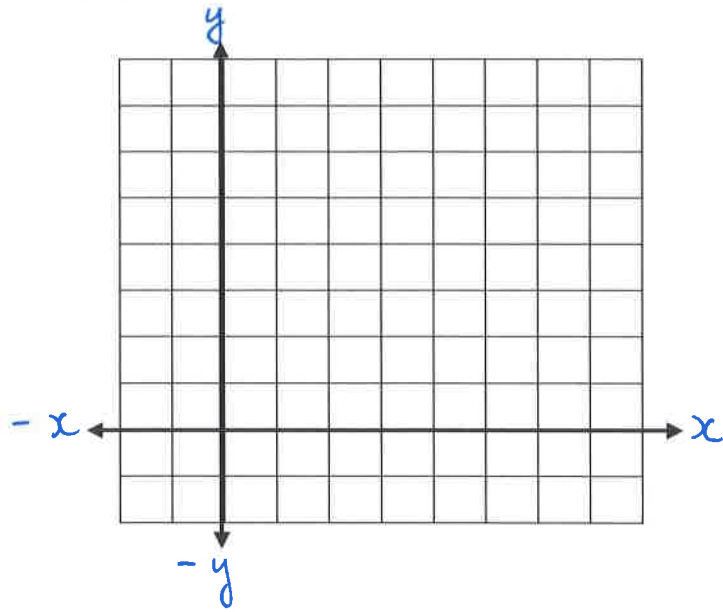
50) $\dfrac{x}{2} - 5 = 3$

51) $-\dfrac{x}{3} + 5 = -1$

52) $2x + 5 = 13$

53) $(x + 3) \div 2 = 9$

54) Fill in the following table of values and graph the line.

$$y = \frac{x}{2} + 2$$

x	y

55) Fill in the following table of values and graph the line.

$$y = 2x - 1$$

x	y