

Name: \_\_\_\_\_

1. Simplify:

a)  $\frac{5}{6} + \frac{5}{8}$

b)  $\frac{5}{6} - \frac{1}{3}$

c)  $3\frac{1}{5} + 2\frac{2}{3}$

d)  $\frac{9}{11} \div \frac{12}{22}$

e)  $3\frac{2}{3} \times 2\frac{3}{4}$

2. Fill in the missing term: 3:5: \_\_\_\_ = 12: \_\_\_\_ :28

3. Write as a rate: 120 km in 3 hours \_\_\_\_\_

4. Write as a ratio (in lowest): 15mm to 3 cm \_\_\_\_\_

5. Fill in the chart:

Percent	Fraction	Decimal
54%		
	$\frac{5}{8}$	

6. Simplify:

a)  $3^3$

b)  $2^6$

c)  $(-5)^2$

d)  $-5^2$

e)  $2^3 \times 5^2$

7. Write as a power with base 2.

$32 = \underline{\hspace{2cm}}$

8. Evaluate for  $x=3$  and  $y=4$

a)  $5x - y$

b)  $2(x - y)^2$

9. Evaluate:

a)  $5 - (-2)$

b)  $-7 + (-3)$

c)  $-8(4)$

d)  $-4(-6)$

e)  $\frac{-27}{9}$

f)  $-3(-2)^3$

g)  $-(5-8) - (-4)(5)$

h)  $2(-3)^2 - 5(-2)$

i)  $\frac{5+8 \times 2}{9-2}$

10. Write a mathematical expression for each using the variable  $x$

a) a number doubled and increased by 5 \_\_\_\_\_

b) Peter's age 2 years ago \_\_\_\_\_

11. Solve showing all your work:

a)  $x + 7 = 3$

b)  $m - 5 = 8$

c)  $-4y = 36$

d)  $2k - 3 = 5$

e)  $\frac{2}{3}n = 12$

f)  $\frac{1}{2}x + 7 = 10$