

# Practice Midterm

1) Compute

$$a) -\frac{5}{7} \cdot \frac{4}{3} =$$

$$b) -5.6 - -7.8 =$$

$$c) -\frac{8}{9} \div \frac{10}{11} =$$

2) compute  $-95.94 \div 7.8$

3) Find  $2 \cdot |x+1|$

a) if  $x = -3$

b) if  $x = -1$

4) A circle has diameter 5m.

a) Find the circumference exactly.

b) Find an approximation of the circumference using  $\pi \approx 3.14$

5) Graph on a set of  
coordinate axes the set of points  
 $(x, y)$  where  $x = -2, -1, 0, 1, \text{ or } 2$   
and  $y = 2 \cdot |x - 1|$

Solve for  $p$ .

$$6) -\frac{2}{3} = p \cdot \frac{4}{5}$$

$$7) p - \frac{1}{2} = \frac{4}{3}$$

$$8) 2p - 1 = 5$$

9) A 10-sided die has sides numbered 1 to 10. What is the probability of rolling a multiple of 3?

10) In a certain field, there is a constant ratio of 3 red flowers for every 2 blue flowers.

If the number of blue flowers goes up by a factor of 6, by what factor does the number of red flowers go up?