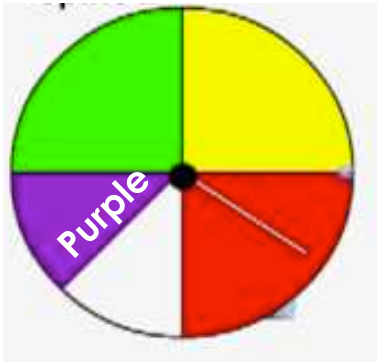


1) Sarah rolled a die 50 times and landed on five a total of 12 times. What is the experimental probability that Sarah will roll a 5?

2) What is the theoretical probability of rolling a 4 on a six-sided die?

3)



What is the probability of landing on purple?

4) A bag holds 5 red beads, 7 yellow beads, and 4 black beads. What would you have to add to the bag in order for the probability of picking a black bead to be $\frac{3}{10}$?

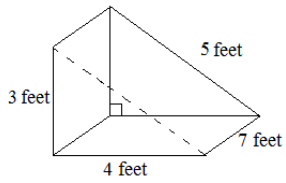
5) Factor the following: $5x + 22$

6) Explain why the following number sentence does not show correct mathematical thinking. Then, write a new number sentence that DOES show correct mathematical thinking.

$$4 + 5 = 9 + 2 = 11 - 10 = 1 + 5 = 6$$

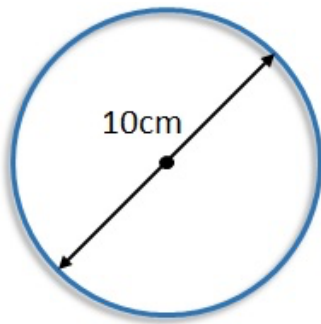
$$4 + 5 = \underline{\quad} + \underline{\quad} = \underline{\quad} - \underline{\quad} = \underline{\quad} + \underline{\quad} = \underline{\quad}$$

7) What is the surface area of this triangular prism? ($SA = 2B + Ph$)



8) The volume of a certain rectangular prism is 960 ft^3 . If the area of the base is 120 ft^2 , what is the height of the prism?

9) In the circle below, how many diameters would it take to completely wrap around the circle?



10) PGJR has decided to start a new after school club. They want the ratio of girls to boys to be 4:6. If they want 60 students to be part of the club, how many girls and how many boys will they need?

Girls: _____ Boys: _____