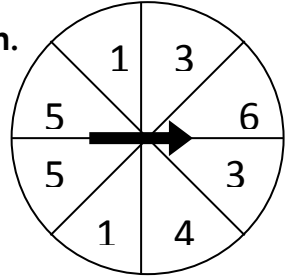# Probability Test Review

2D and 3D Measurement Included

Use the spinner to answer #1 – 3. Answer as a *fraction* in simplest form.

1) What is the ***P***(a number less than 5)?

2) What is the ***P***(prime number)?

3) What is the ***P***(odd)?

- -

Find the sample space.

4) Pamela tosses two coins, and rolls a 6
sided number cube. How many outcomes
are there in the sample space?

5) The Duggar family has 4 children, so far. Draw
a tree diagram to show all the possible combinations
of boys and girls in the family.

- -

Identify the following situations (6 – 9) as independent, *I*, or dependent, *D*, events?

6) You roll a number cube and **if** you get a 5, you roll it again._____

7) You toss a coin, then toss it again, and toss it again. _____

8) You pick a card, do not replace it, and draw another card. _____

9) You draw a red marble, replace it, and draw a yellow marble. _____

- -

Find the probability of each event. *Hint some are independent, some are dependent.

10) A coin is tossed 6 times. What is the probability of getting heads all 6 times?

11) Use the results from problem #4. What is the probability of both coins landing on the same side and rolling an even number?

12) Robert recorded the results to an experiment.

The spinner landed on orange – 6 times,
purple – 9 times, silver – 3 times, and magenta – 7 times.

According to the results, what would be the
probability of spinning a purple, as a percentage?

13) Three number cubes are rolled. What is the
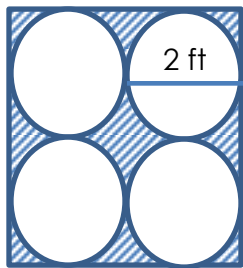probability that each cube shows a 5?

14) You have 25 marbles in a bag. Six are red,
5 are blue, 8 are green, and six are swirls. On the
first draw you get a swirl marble. If it is not replaced,
find the probability of getting a swirl, and then a blue?

15) In a deck of 52 cards, 26 are red and 26 are black.
Find the probability the first card will be red and the
second card is black if you do not replace the first card you draw.

16) A bag contains 8 red marbles, 8 blue marbles
and 9 green marbles. If you do not replace the marbles
after each draw, what is the probability of drawing
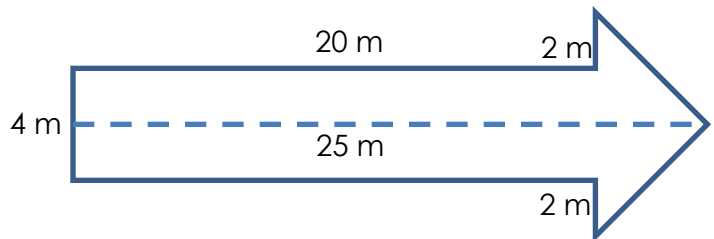a blue marble, then a green marble?

17) Find the area of the shaded region.
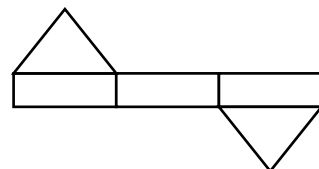
2 ft

Area:_____

18) Find the area of the figure below.

20 m

2 m

4 m

25 m

2 m

Area:_____

19) Which solid figure can be made from the net shown?

F. Triangular pyramid   G. Triangular prism
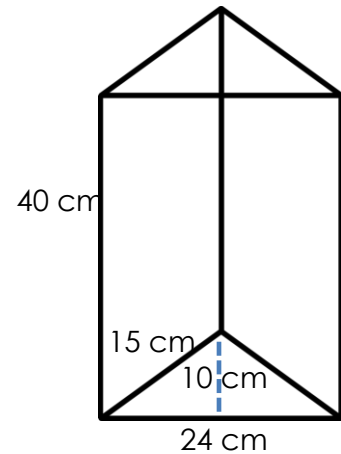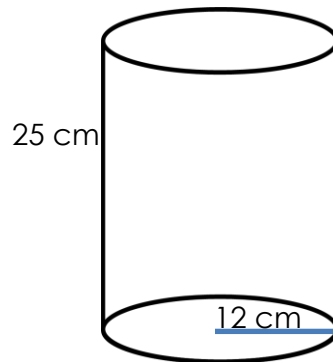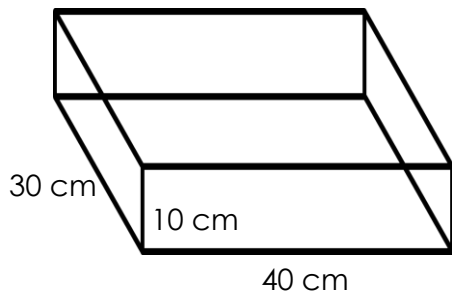H. Rectangular prism   J. Rectangular pyramid

20) How many cubic feet of mulch can be hauled in a dump truck if its bed is 7 feet deep, 4.5 feet wide, and 10 feet long.

A. 480 cu. ft.   B. 315 cu. ft.
C. 21.5 cu. ft.   D. 157 cu. ft.

21-23) James is bringing sand to school for an art project. His group is counting on him to bring in as much sand as he can. Which container should he use to bring the sand to school?
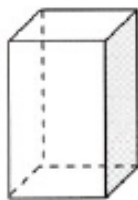
30 cm
10 cm
40 cm

25 cm
12 cm

40 cm
15 cm
10 cm
24 cm

21. Volume: _____   22. Volume: _____   23. Volume: _____

24) The volume of the solid figure below is 240 cubic inches. The area of its base is 24 square inches. What is the height of the solid?

25) Haley checked a cylindrical beaker in the science lab and found that it was $\frac{1}{2}$ empty. How many cubic centimeters of fluid remains in the beaker?

3 cm

10 cm