

Tutorials Tomorrow! 4/29

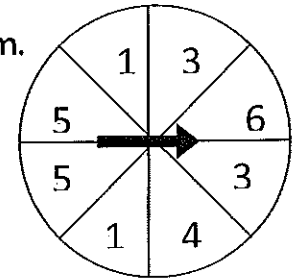
Test Thurs

Probability Test Review

2D and 3D Measurement Included

TEST TOMORROW

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

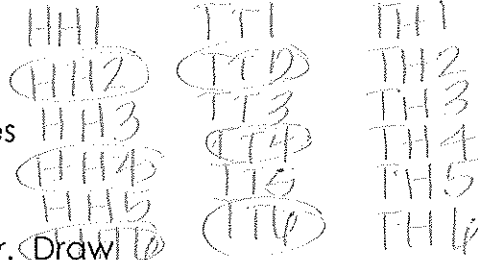


- 1) What is the P (a number less than 5)? $\frac{5}{8}$
- 2) What is the P (prime number)? $\frac{1}{2}$
- 3) What is the P (odd)? $\frac{3}{4}$

~~Factor of 6~~

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? (18)



- 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. (16)

(A) (B)

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. D
- 7) You toss a coin, then toss it again, and toss it again. I
- 8) You pick a card, do not replace it, and draw another card. D
- 9) You draw a red marble, replace it, and draw a yellow marble. I

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?

$\frac{1}{64}$

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

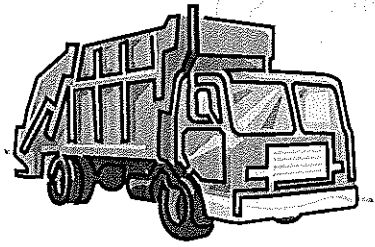
$\frac{6}{18} = \frac{1}{3}$

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.

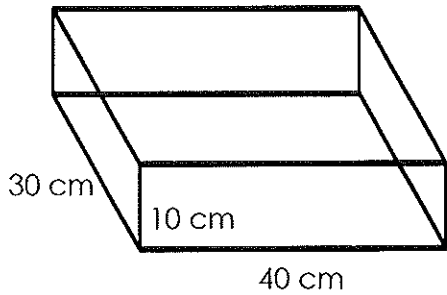
- A. 480 cu. ft.
C. 21.5 cu. ft.

- B. 315 cu. ft.**
D. 157 cu. ft.

$$7 \times 4.5 \times 10 = 315$$

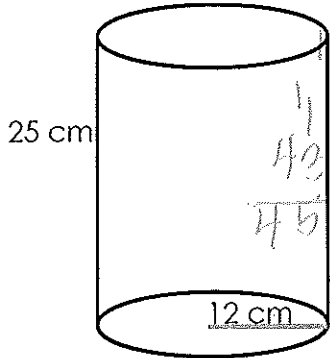


21-23) James is bringing sand to school for an art project. His group is counting on him to bring in as much sand as he can. Which container should he use to bring the sand to school?



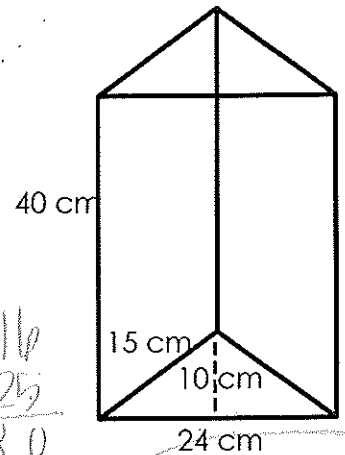
$$\begin{array}{r} 400 \\ 30 \\ \hline 12000 \end{array}$$

21. Volume: 12,000 cm³



$$\begin{array}{r} 1144 \\ 314 \\ \hline 3576 \\ 1140 \\ 43200 \\ \hline 45216 \\ 25 \\ \hline 11304 \end{array}$$

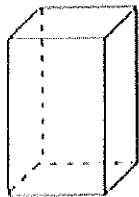
22. Volume: 11,304 cm³



$$\begin{array}{r} 12 \times 10 \\ 120 \\ 40 \\ \hline 4800 \end{array}$$

23. Volume: 4,800 cm³

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?

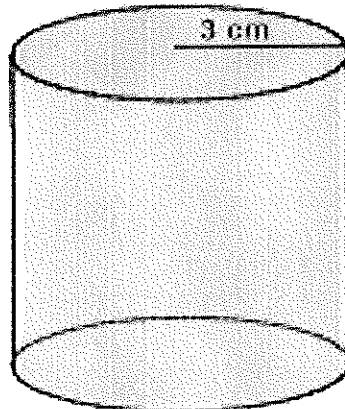


$$240 = 24 \cdot h$$

$$\frac{240}{24} = \frac{24 \cdot h}{24}$$

$$10 = h$$

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?



$$\begin{array}{r} 3.14 \\ 9 \\ \hline 2826 \\ \times 10 \\ \hline 28260 \\ 141.3 \text{ cm}^3 \end{array}$$

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.

(1)

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

$$\frac{9}{25} = \frac{36}{100} = 36\%$$

(I)

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

$$\frac{1}{6} \times \frac{1}{6} \times \frac{1}{6} = \frac{1}{216}$$

$\frac{3.36}{2186}$

(D)

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?

$$\frac{1}{25} \times \frac{5}{24} = \frac{1}{240}$$

(D)

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.

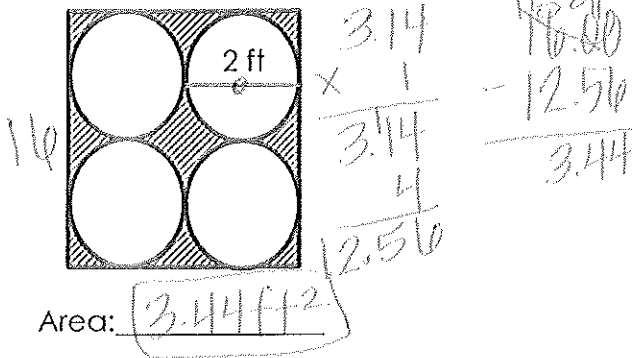
$$\frac{1}{2} \times \frac{26}{51} = \frac{13}{51}$$

(D)

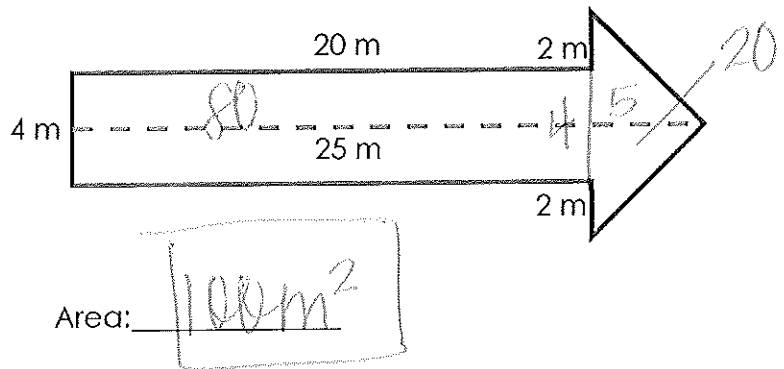
16) A bag contains 8 red marbles, 8 blue marbles and 9 green marbles. If you do not replace the marbles after each draw, what is the probability of drawing a blue marble, then a green marble?

$$\frac{8}{25} \times \frac{3}{24} = \frac{3}{25}$$

17) Find the area of the shaded region.



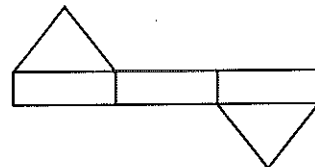
18) Find the area of the figure below.



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

- F. Triangular pyramid
- H. Rectangular prism

- G. Triangular prism
- J. Rectangular pyramid



What are pyramids surrounded by?