

The following repeating decimal is equal to what fraction?  $0.545454545\dots$

$$= 0.54 + 0.0054 + 0.000054 + \dots$$

$$a_1 = .54 \quad r = .01$$

$$S_n = \frac{a_1}{a-r} = \frac{0.54}{1-.01} \quad \frac{.54}{.99} = \frac{54}{99} = \frac{6}{11}$$

The following repeating decimal is equal to what fraction?  $0.81818181\dots$

$$.81 + .0081 + .000081 + \dots$$

$$a_1 = .81$$

$$r = .01$$

$$\frac{.81}{1-.01} = \frac{.81}{.99} = \frac{81}{99} = \frac{9}{11}$$

$$.137137137137\dots$$

$$.137 + .000137 + .000000137 + \dots$$

$$a_1 = .137 \quad r = .001 \quad \frac{.137}{1-.001} = \frac{137}{999}$$

Find each probability as a fraction

	Carrots	Peas	Beans	Corn	Total
Adult	14	8	9	20	51
Child	19	2	4	25	50
Total	33	10	13	45	101

$$P(\text{Carrots or Child}) = \frac{64}{101}$$

$$P(\text{Adult and Corn}) = \frac{20}{101}$$

$$P(\text{Peas or Beans}) = \frac{23}{101}$$

$$P(\text{Corn and Carrots}) = \frac{0}{101}$$

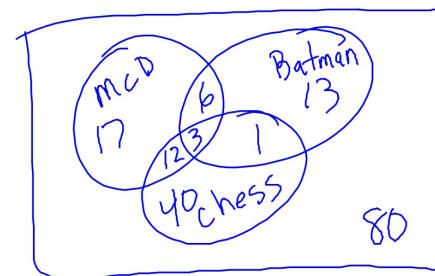
$$P(\text{Child} | \text{Peas}) = \frac{2}{50}$$

$$P(\text{Beans} | \text{Adult}) = \frac{9}{51}$$

The probability that you win the 100 yard dash at the track meet is  $\frac{5}{8}$ . The probability that you win the shotput at the track meet is  $\frac{2}{13}$ . Find the following probability as a percent to the nearest hundredth.

$$\frac{5}{8} + \frac{2}{13} - \frac{5}{8} \cdot \frac{2}{13}$$

68.23%



$$P(\text{chess but not Batman}) = \frac{52}{172}$$

$$P(\text{NOT Mcd}) = \frac{134}{172}$$

they are out of shape.

a. Find the sample proportion to the nearest whole percent.

$$\frac{624}{1200} = 52\%$$

b. Find the margin of error to the nearest whole percent.

$$\frac{1}{\sqrt{1200}} \pm 3\%$$

c. Find the interval that most likely contains the population proportion.

$$52\% \pm 3\%$$

$$49\% \text{ to } 55\%$$