#73

Name _____

Percents Practice

Solve the problems below using the percent proportion.

A 1) Jessie estimates the yards thrown in this quarter will be 75 yards. The actual number of yards is 110. Find the percent error.

$110 - 75 = \frac{35}{110} = .32$ 32% Error

A 2) Tom Brady's investment in the stock market cost $1600 to purchase and was worth $1850 one year later. By what percent did the purchase ~~decrease~~ increase?

$\frac{c}{0} = \frac{1850 - 1600}{1600} = \frac{250}{1600} = .1563$

15.63% ↑

A, B, C 3) Gronk's old car had an average fuel economy of 30 miles per gallon of gasoline. His new car has an average fuel economy of 27.6 miles per gallon of gasoline. What is the percent of decrease?

$\frac{c}{0} = \frac{2.4}{30} = .08 \times 100 =$ 8% ↓

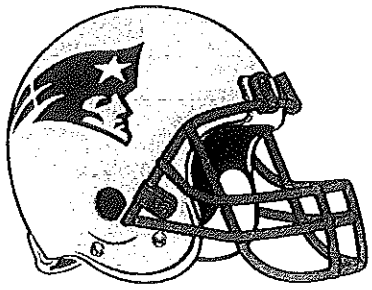
A, B 4) Express $\frac{3}{5}$ as a decimal and a percent.

$\frac{3}{5} = .6 = 60\%$

B, C 5) Suppose Mark is receiving an allowance increase so he can buy a replica helmet of a Patriot's helmet. If he could choose the amount of the increase, should he choose an increase of $\frac{1}{5}$ or an increase of 15%? Why?

$\frac{1}{5} = .2 = 20\%$

Wants $\frac{1}{5}$ increase.



A, B, C 6) 150% of 320 is what number?

$\frac{x}{320} = \frac{150}{100}$

$100x = 48000$

$x = 480$

7) What percent of 10 is 35?

$\frac{35}{10} = \frac{x}{100}$

$3500 = 10x$ $x = 350$

A 8) The original price of a football is \$50. The sale price includes a 20% discount. What is the sale price?

$50 \times .2 = 10$

$50 - 10 = \$40$

A 9) A store pays \$70 for a jersey. The percent of markup is 20%. What is the selling price?

$\frac{x}{70} = \frac{20}{100}$

$100x = 1400$

$x = \$14$

$70 + 14 = \$84$

B, C 10) Your parents want a new TV to watch the big game. A $729.50 TV is discounted 40%. The next month, the sale price is discounted 60%. Is the TV now "free?" If not, what is the sale price?

729.50 × .4 = 291.80 729.50 - 291.80 = 437.70

~~291.80 × .6 = 175.08~~ 437.70 × .6 = 262.62

437.70 - 262.62 = ~~24.08~~ 175.08

Sale price = ~~$24.08~~ $175.08 Not free

B, C 11) Which is greater, $\frac{9}{10}$ or 88%?

$\frac{9}{10} = .9$ $\frac{9}{10}$ is greater

88% = .88

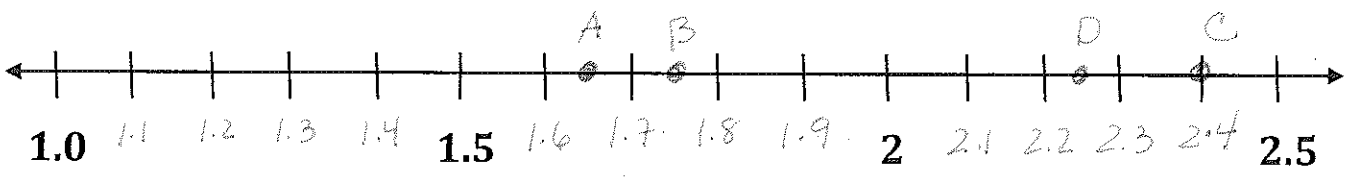
B, C 12) Place the following numbers on the number line below:

A. 1.65

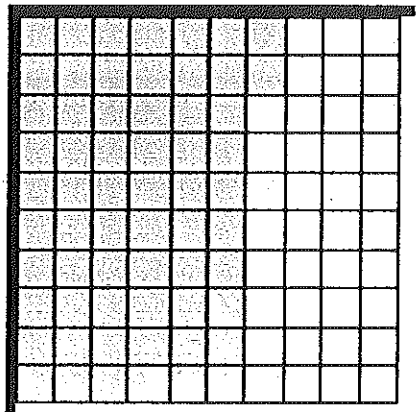
B. $1\frac{3}{4} = 1.75$

C. 2.4

D. $2\frac{1}{4}$



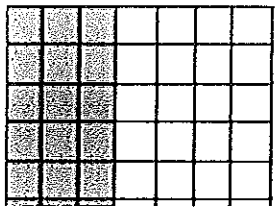
A, B, C 13) What percent of the grid is shaded?



62%

A, B, C

14) What percent of the grid is shaded?



$\frac{15}{35} = .4286$

42.86%

B 15) A digital camera costs $230. The camera is on sale for 30% off. What is the final price?

$230 \times .3 = 69$

$230 - 69 = \$161$

C.

16) A digital camera costs $230. The camera is on sale for 30% off, and you have a coupon for an additional 15% off the sale price. What is the final price?

$230 \times .3 = \$69$

$230 - 69 = \$161$

$\frac{x}{161} = \frac{15}{100}$ $100x = 2415$ $x = 24.15$

$161 - 24.15 = \$136.85$

$\$136.85$

A, B, C 17) Tell which number is greater.

$\frac{12}{5}$ *or* 245%

2.4
240 %

18) 15% of the school parking spaces are handicap spaces. The school has 18 handicap spaces. How many parking spaces are there?

$\frac{18}{x} = \frac{15}{100}$ $15x = 1800$ $x = 120$

19) Of the 25 students on a field trip, 16 students bring cameras. What percent of the students bring cameras?

$\frac{16}{25} = \frac{x}{100}$ $25x = 1600$ $x = 64\%$

C 20) Of the 37 students on a field trip, 24 do not bring cameras. What percent of the students bring cameras?

37
24
13

$24\frac{13}{37} = 64.9\%$

B, C. 21) Find the sale price:

Original Price: $50
Discount: 15%
Sale Price: ?

$50 \times .15 = \$7.50$

$50 - \$7.50 = \$42.50$

22) Find the original price:

Original price: ?
Discount: 20%
Sale price: $75

$\frac{75}{x} = \frac{80}{100}$

$80x = 7500$

$x = 93.75$

A 23) You estimate that a jar contains 68 marbles. The actual number of marbles is 60. Find the percent error.

$\frac{8}{60} = .133 =$ 13.3% Err

24) A movie theater offers 30% off the price of a movie ticket to students from Blake. The regular price of a movie ticket is $11.50. What is the discounted price that you would pay for a ticket?

3, C 25) Which list of numbers is in order from least to greatest?

.8, .625, .7, .09 .09, .625, .7, .8

a) 0.8, $\frac{5}{8}$, 70%, 0.09 $\frac{5}{8}$ 70% .8

b) $\frac{5}{8}$, 70%, 0.8, 0.09

c) 0.09, $\frac{5}{8}$, 0.8, 70%

d) 0.09, $\frac{5}{8}$, 70%, 0.8