

# KEY

## Fractions to Decimals to Percents Final Practice Part 1: (all fractions are to be in lowest terms)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

A. Fill in the blanks below with the correct answer. (½ mark each, total 9 marks)

| Fractions                         | Decimals | Percents |
|-----------------------------------|----------|----------|
| 3 1/4                             | 3.25     | 325%     |
| 1/8                               | 0.125    | 12.5%    |
| 3 3/4                             | 3.75     | 375%     |
| 2 4/5                             | 2.8      | 280%     |
| 1/3                               | 0.3̄     | 33.3̄%   |
| 1/1000                            | 0.001    | 0.1%     |
| $\frac{35}{1000}$ $\frac{7}{200}$ | 0.035    | 3.5%     |
| $\frac{19}{20}$                   | 0.95     | 95%      |
| $\frac{8}{100} = \frac{2}{25}$    | 0.08     | 8%       |

B. Answer the following questions by providing the answer, and show all work.

a. What is 30 % of the following? ( 1 mark each, total 4 marks)

i) \$ 400

$$400 \times 0.3 = 120$$

ii) \$ 150

$$150 \times 0.3 = 45$$

iii) \$ 110

$$110 \times 0.3 = 33$$

iv) \$ 12

$$12 \times 0.3 = 3.6$$

b. i) If Nolan went to the music store to buy some new band equipment that were 40% off their original price, what did he pay for each, without tax? ( 2 marks)

-guitar regular price is \$495

40% off meaning you pay 60%

$$495 \times 0.6 = \$297$$

-drums regular price is \$650

$$650 \times 0.6 = \$390$$

sale prices x 0.12 (tax) (687 x 0.12 = \$ 82.44 tax)  
 or both (687 + 82.44 = \$ 769.44) total with tax.

- ii) If he was to pay 12% sales tax on both items, how much did he pay in total? (2 marks)  
 c. If a movie theatre had 550 seats in total, but was only 60% full, how many seats were empty? (2 marks)

$$550 \times 0.6 = 330 \text{ (full)}$$

$$550 - 330 = 220 \text{ (empty)}$$

total

- d. Kamloops held a Backstreet Boys concert had 1820 fans attending. The stadium was only filled 70% of full capacity.

i) How many seats are available if a concert is 100% full? (2 marks) (2 ways to solve)

(1)

$$\frac{1820}{x} = \frac{70}{100}$$

$$1820 \times 100 \div 70 = 2600$$

(2)

$x \times 0.7 = 1820$  (70% is 0.7)  
 (let's go backwards) sc = full  
 $1820 \div 0.7 = x$   
 $x = 2600$

ii) How many seats were not filled at this concert? (1 mark)

$$2600 - 1820 = 780 \text{ (empty)}$$

all seats      seats sold

- e. If you went shopping for some clothing and found some pants for \$70, a shirt for \$25 dollars, and a new belt for \$15. All of the items were 25% off.

25% off means you pay 75% on sale.  
 $75\% = 0.75$

i) How much were the total items on sale? (2 marks)

Pants:  $70 \times 0.75 = \$52.50$   
 Shirt:  $25 \times 0.75 = \$18.75$   
 Belt:  $15 \times 0.75 = \$11.25$

ii) How much was the grand total with sales tax at 12%? (1 mark)

$$52.50 + 18.75 + 11.25 = 82.50 \text{ (sale price total)}$$

$$82.5 \times 1.12 = \$92.40 \text{ (total price sale price + tax)}$$

- f. You ate 25% of the cookies that were in the box. If there were 70 cookies in total, how many are left? (2 marks)

At 25%, so 75% left,  $75\% = 0.75$

$$70 \times 0.75 = 52.5 \text{ cookies left}$$

- g. Your parents bought you a new car of choice that was regular \$35,000, but your parents paid only \$12,250 when on sale. What percent off was the car? (2 marks)

(Regular price)  $35,000 - (\text{sale price}) 12,250 = 22,750$  (amount off)

$$\frac{22750}{35000} = \frac{x}{100}$$

you only paid 35% of full price

$$22750 \times 100 \div 35000 = 65\% \text{ off}$$