

Name: _____

Class: _____

One Variable Statistics Sample Examination

Question 1

A school is selling candles for a fundraiser. Below is the number of candles sold, organized by price.

price of candle	number of candles sold
small candle: \$11	68
medium candle: \$18	45
large candle: \$25	21

(a) Find the **mean** price of candles. Show your work.

(b) Find the **median** price of candles. Show your work or explain your reasoning.

(c) Find the **mode** price of candles. Explain your reasoning.

Question 2

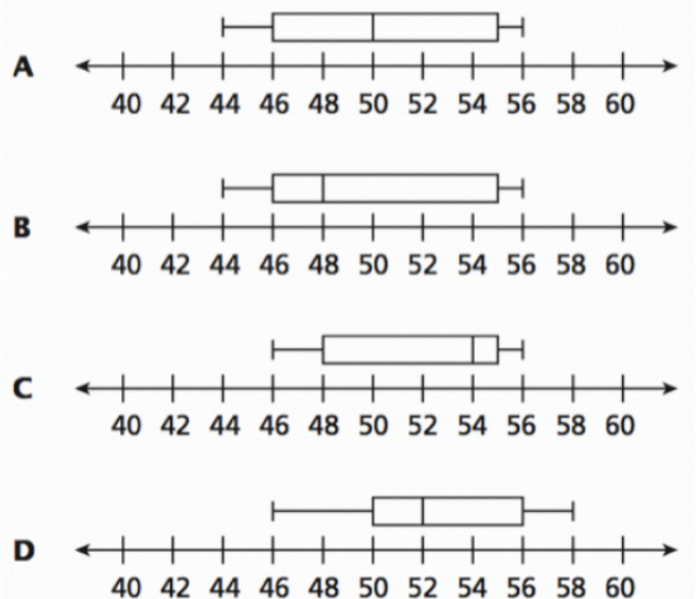
Consider the four box plots:

(a) Which box plot has the largest median?

(b) Which box plot has the largest interquartile range?

(c) Which box plot has the largest value?

(d) Which box plot has the smallest value?



Question 3

A video game developer wants to know how long it takes people to finish playing their new game. They surveyed a random sample of 13 players and asked how long it took them (in minutes).

1,235	952	457	1,486	1,759	1,148	548	1,037	1,864	1,245	976	866	1,431
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Use these values to construct a box plot. Label the number line below as appropriate.



Question 4

A moving company can move 2 tons of boxes per day.

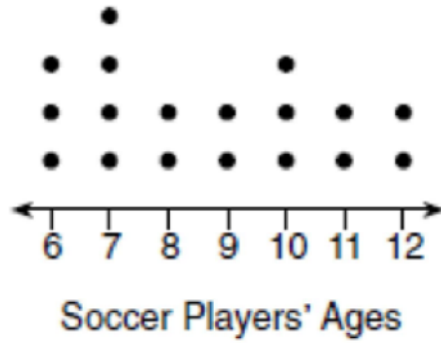
(a) Find the average number of *kilograms* of boxes that the moving company can move in a one *hour*. Round to the nearest *thousandth* as necessary. Use the Algebra Regents Reference sheet below.

1 inch = 2.54 centimeters	1 kilometer = 0.62 mile	1 cup = 8 fluid ounces
1 meter = 39.37 inches	1 pound = 16 ounces	1 pint = 2 cups
1 mile = 5280 feet	1 pound = 0.454 kilograms	1 quart = 2 pints
1 mile = 1760 yards	1 kilogram = 2.2 pounds	1 gallon = 4 quarts
1 mile = 1.609 kilometers	1 ton = 2000 pounds	1 gallon = 3.785 liters
		1 liter = 0.264 gallon
		1 liter = 1000 cubic centimeters

(b) *To the nearest hour*, how long does it take the moving company to move 605 kilograms of boxes? Show all work.

Question 5

Below are the ages of players in Noah's community soccer league.



- (a) Determine the mean of the players' ages, to the *nearest tenth*.

- (b) Determine the median age.

- (c) Determine the range of the ages.

- (d) Describe the effect on the mean, median, and range if 10 years passes.