Data Analysis - The Mean

Find the mean for these, the answers are integers.

1 16, 24, 41.

Add the scores

$\bar{x} = \frac{\square}{3} = \square$

Divide total by 3

Three scores = 3

2 35, 47, 64, 31, 53.

$\bar{x} = \frac{\square}{\square} = \square$

3 8, 13, 17, 23, 15, 19, 31.

$\bar{x} = \frac{\square}{\square} = \square$

4 -6, -2, 5, -7, 3, 0, -4, 6, -9, 4.

$= \frac{\square}{\square} = \square$

These questions include units. Find $\bar{x}$ to 1 d.p.

5 846 m, 277 m, 567 m, 308 m.

$= \frac{\square}{\square} =$ _____

6 1.2 kg, 2.3 kg, 805 g.

$= \frac{\square}{\square} =$ _____

Answer in grams

7 25 s, 1 min 41 s, 82 s, 2 min, 1 m 17 s, 19 s, 1 min 53 s, 34 s, 41 s.

$= \frac{\square}{\square} =$ _____

Answer in min & s

8 56 cm, 25 cm, 1.2 m, 38 cm, 1.07 m, 94 cm, 1.9 m, 74 cm.

$= \frac{\square}{\square} =$ _____

Answer in cm

9 0.7 L, 1.05L, 217 ml, 1.2 L, 850 mL, 1.5 L, 3.03 L

$= \frac{\square}{\square} =$ _____

Answer in L

Find the mean for these Stem and Leaf plots. Round to 1 decimal place.

10

Tens	Units
0	5 7 8 8
1	3 8
2	0 0 0 3 9
3	3 4 6

$= \frac{\square}{\square} =$ _____

$= \frac{\square}{\square} =$ _____

11

Tens	Units
9	1 4 8 8 8
10	3 5 9
11	0 4 6 6

$= \frac{\square}{\square} =$ _____

12

Tens	Units
78	0 0 1 4
79	2 6 7 9
80	4 5

Liam performs market research for supermarkets. He prices 6 products at 5 stores to base his research, shown in the table. Total each column.

Product	Shop A	Shop B	Shop C	Shop D	Shop E
Window Cleaner	$3.25	$3.07	$4.15	$3.35	$3.56
Baked Beans	$1.82	$1.96	$2.19	$1.75	$1.99
Eggs	$5.35	$4.83	$6.10	$5.25	$5.85
Laundry Powder	$14.60	$15.45	$14.95	$14.90	$10.75
Pasta	$3.11	$3.20	$3.55	$2.96	$3.87
BBQ Chicken	$9.00	$10.55	$12.17	$11.60	$10.85
13 Total					

Key: ☒ Price Above Store Average ☆ Price Equal to, or Below Store Average

Find the average price for a product from all the shops. Then colour a star if the shop price equals or is less than the average price for the product. Colour the cross if the price is above the average shop price.

14 Window Cleaner

Add all shop prices for Window Cleaner

$\bar{x} = \frac{\square}{5} =$ $\square$

15 Baked Beans

$= \frac{\square}{\square} = \square$

16 Eggs

$= \frac{\square}{\square} = \square$

17 Laundry Powder

$= \frac{\square}{\square} = \square$

18 Pasta

$= \frac{\square}{\square} = \square$

19 Barbequed Chicken

$= \frac{\square}{\square} = \square$

20 Discuss Shop E result in class.

Data Analysis - The Median

Rewrite these scores in ascending order. Circle the median. (Middle)

1 8, 7, 10, 9, 6, 5, 4.

□, □, □, ○, □, □, □.

2 16, 6, -5, 8, 11.

□, □, ○, □, □.

3 15, 9, 12, 3, 7, 2, 6, 6, 7.

4 8, 8, 6.

An even number of scores has its median between the two centre numbers. Average the two middle numbers.

5 3, 11, 4, 8.

Rewrite Ascending □, ○, ○, □.

$$\frac{\bigcirc + \bigcirc}{2} = \square$$

6 12, 23, 15, 24, 21, 14.

□, □, ○, ○, □, □.

$$\frac{\bigcirc + \bigcirc}{2} = \square$$

7 5, 3, 2, 7, 6, 4, 7, 4, 6, 8.

$$\frac{\bigcirc + \bigcirc}{\square} = \square$$

8 8, 3, 14, -5, 0, 6, -2, -7.

$$\frac{\bigcirc + \bigcirc}{\square} = \square$$

Find the median for these scores. Answer using the working spaces below.

9 8, 3, 2, 1, 9.

10 24, 30, 14, 10.

11 156, 72, 83, 28, 40, 133.

12 16, 7, 12, -3, 7, 10, 0.

13 0, -2, 6, -4, 8, 4, -4, 6.

14 -8, 2, 10, -6, 4, -8, 6, -4, -5.

15 2.4, 4.1, 2.9. 4.3, 3.6, 7.8.

Answer below, write the question number answered in the box below.
3 spaces for odd numbered data sets.
4 spaces for even numbered data sets.

□ _____

The median is □

□ _____

The median is □

□ _____

_____

□ _____

$$\frac{\bigcirc + \bigcirc}{\square} = \square$$

□ _____

$$\frac{\bigcirc + \bigcirc}{\square} = \square$$

□ _____

$$\frac{\bigcirc + \bigcirc}{\square} = \square$$

□ _____

$$\frac{\bigcirc + \bigcirc}{\square} = \square$$

Find the median for these Stem and Leaf plots.

16

Stem	Leaf
0	3 3 7
1	0
2	5 6 6 6 7
3	2 4

The median is □

17

Tens	Units
8	3 5 8
9	4 6 7 9
10	0 5 5
11	1 2

$$\frac{\bigcirc + \bigcirc}{\square} = \square$$

18

Tens	Units
97	0 1 1
98	4 5 5 5
99	0 0 2
100	2 3 4 4

$$\frac{\bigcirc + \bigcirc}{\square} = \square$$

19

Stem	Leaf
-4	0 0 2 5 8
-3	2 2 2
-2	4 6 7 8
-1	1 1
-0	6 7 7 7 9
0	0 0 3 9 9
1	2 6 6 6 8

_____