

Quartiles

Sheet 1

Example: Find the quartiles for the given data: 5, 32, 9, 11, 10, 15, 21, 8.

Solution: Arrange the data in an increasing order.

5, 8, 9, 10, 11, 15, 21, 32

Second quartile : $\frac{10+11}{2} = \mathbf{10.5}$

First quartile : $\frac{8+9}{2} = \mathbf{8.5}$ Third quartile : $\frac{15+21}{2} = \mathbf{18}$

Find the quartiles for each set of numbers.

1) 32, 13, 46, 28, 51, 62, 19, 38, 73, 47

First quartile : _____ Second quartile : _____ Third quartile : _____

2) 98, 36, 82, 61, 73, 48, 58, 39

First quartile : _____ Second quartile : _____ Third quartile : _____

3) 64, 7, 34, 53, 28, 41, 13, 72, 10

First quartile : _____ Second quartile : _____ Third quartile : _____

4) 13, 63, 29, 19, 71, 56

First quartile : _____ Second quartile : _____ Third quartile : _____

5) The average hibernation periods (in weeks) of Alpine Marmots, Common Poorwills, American Black Bears, Bats, Dwarf Lemurs, Box Turtles and Bumblebees were recorded by a Zoologist.

28, 15, 15, 46, 27, 21, 24

Find the first, second and third quartiles.

First quartile : _____ Second quartile : _____ Third quartile : _____

Quartiles

Sheet 1

Example: Find the quartiles for the given data: 5, 32, 9, 11, 10, 15, 21, 8.

Solution: Arrange the data in an increasing order.

5, 8, 9, 10, 11, 15, 21, 32

Second quartile : $\frac{10+11}{2} = \mathbf{10.5}$

First quartile : $\frac{8+9}{2} = \mathbf{8.5}$ Third quartile : $\frac{15+21}{2} = \mathbf{18}$

Find the quartiles for each set of numbers.

1) 32, 13, 46, 28, 51, 62, 19, 38, 73, 47

First quartile : 28 Second quartile : 42 Third quartile : 51

2) 98, 36, 82, 61, 73, 48, 58, 39

First quartile : 43.5 Second quartile : 59.5 Third quartile : 77.5

3) 64, 7, 34, 53, 28, 41, 13, 72, 10

First quartile : 11.5 Second quartile : 34 Third quartile : 58.5

4) 13, 63, 29, 19, 71, 56

First quartile : 19 Second quartile : 42.5 Third quartile : 63

5) The average hibernation periods (in weeks) of Alpine Marmots, Common Poorwills, American Black Bears, Bats, Dwarf Lemurs, Box Turtles and Bumblebees were recorded by a Zoologist.

28, 15, 15, 46, 27, 21, 24

Find the first, second and third quartiles.

First quartile : 15 Second quartile : 24 Third quartile : 28