

Mean — Numbers to 50



Name: _____

Date: _____

Find the mean of each set of numbers.

1 MEAN

30, 28, 11, 5, 11

$$30 + 28 + 11 + 5 + 11 = 85$$

$$85 \div 5 = 17$$

17

2 MEAN

50, 32, 26, 32, 40

3 MEAN

16, 48, 1, 19, 1

4 MEAN

16, 25, 25, 50, 9

5 MEAN

49, 18, 6, 31, 31

6 MEAN

20, 21, 21, 5, 8

7 MEAN

27, 35, 27, 50, 21

8 MEAN

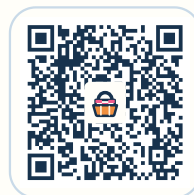
26, 38, 19, 19, 13

9 MEAN

21, 21, 7, 10, 26

10 MEAN

10, 28, 10, 6, 31



Median — Numbers to 50



Name: _____

Date: _____

Find the median of each set of numbers.

1 MEDIAN

32, 5, 5, 38, 25

given: 32 5 5 38 25

sorted: 5 5 25 32 38

25

2 MEDIAN

36, 32, 42, 28, 32

3 MEDIAN

29, 39, 1, 10, 1

4 MEDIAN

48, 44, 34, 48, 21

5 MEDIAN

43, 32, 10, 43, 7

6 MEDIAN

36, 14, 41, 14, 25

7 MEDIAN

42, 24, 6, 34, 24

8 MEDIAN

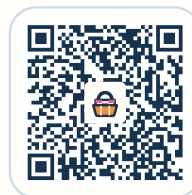
45, 13, 45, 20, 27

9 MEDIAN

24, 33, 26, 24, 28

10 MEDIAN

31, 38, 22, 7, 7



Mode — Numbers to 50



Name: _____

Date: _____

Find the mode of each set of numbers.

1 **MODE**

43, 24, 17, 43, 28

43 appears 2 times

43

2 **MODE**

23, 27, 1, 8, 1

3 **MODE**

35, 38, 38, 30, 44

4 **MODE**

6, 6, 22, 12, 39

5 **MODE**

19, 39, 37, 26, 39

6 **MODE**

44, 44, 4, 50, 48

7 **MODE**

29, 6, 48, 48, 14

8 **MODE**

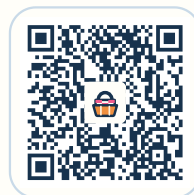
5, 33, 2, 5, 45

9 **MODE**

22, 1, 22, 40, 10

10 **MODE**

14, 26, 40, 26, 19



Range — Numbers to 50



Name: _____

Date: _____

Find the range of each set of numbers.

1 RANGE
16, 26, 28, 17, 28

$$28 - 16 = 12$$

12

2 RANGE
2, 1, 9, 1, 27

3 RANGE
32, 46, 46, 14, 37

4 RANGE
48, 45, 33, 33, 11

5 RANGE
22, 17, 22, 12, 7

6 RANGE
3, 28, 3, 22, 49

7 RANGE
6, 22, 42, 22, 23

8 RANGE
43, 13, 12, 43, 24

9 RANGE
6, 24, 14, 14, 47

10 RANGE
18, 19, 18, 34, 11



Probability — 12 counters

Name: _____

Date: _____



Each bag holds these counters. Simplest form, and watch for NOT.

1 2 red, 3 blue, 7 green $P(\text{not blue})$ $\frac{3}{4}$

$$\begin{aligned}2 + 3 + 7 &= 12 \\ \text{not blue: } 12 - 3 &= 9 \\ 9/12 &= 3/4\end{aligned}$$

2 3 red, 2 blue, 7 green $P(\text{not blue})$ _____

3 3 red, 9 blue $P(\text{red})$ _____

4 4 red, 4 blue, 4 green $P(\text{blue})$ _____

5 3 red, 5 blue, 4 green $P(\text{green})$ _____

6 10 red, 2 blue $P(\text{red})$ _____

7 4 red, 4 blue, 4 green $P(\text{not green})$ _____

8 4 red, 5 blue, 3 green $P(\text{green})$ _____

9 2 red, 2 blue, 8 green $P(\text{not green})$ _____

10 5 red, 4 blue, 3 green $P(\text{not green})$ _____



Predict counts from probability — Probability as a fraction



Name: _____

Date: _____

Predict how many times each event happens.

- 1 $P(\text{red}) = 17/20$. In 80 spins, how many land on red?

$$80 \div 20 = 4$$

$$17 \times 4 = 68$$

68

- 2 $P(\text{a win}) = 1/2$. In 300 games, how many are wins?

- 3 $P(\text{a win}) = 6/25$. In 200 games, how many are wins?

- 4 $P(\text{heads}) = 1/4$. In 60 flips, how many are heads?

- 5 $P(\text{blue}) = 8/10$. In 80 draws, how many are blue?

- 6 $P(\text{heads}) = 3/4$. In 100 flips, how many are heads?

- 7 $P(\text{red}) = 1/2$. In 50 spins, how many land on red?

- 8 $P(\text{a win}) = 17/20$. In 20 games, how many are wins?

- 9 $P(\text{blue}) = 1/4$. In 100 draws, how many are blue?

- 10 $P(\text{a win}) = 23/25$. In 300 games, how many are wins?



The counting principle — Two stages

Name: _____

Date: _____



Work out how many ways each choice can be made.

- 1 6 flavors and 2 cones. How many different ice creams can you make?

12

- 2 4 flavors and 2 cones. How many different ice creams can you make?

- 3 5 frames and 7 wheels. How many different bikes can you make?

- 4 5 frames and 3 wheels. How many different bikes can you make?

- 5 9 shirts and 6 shorts. How many different outfits can you make?

- 6 8 frames and 9 wheels. How many different bikes can you make?

- 7 8 mains and 6 sides. How many different meals can you make?

- 8 2 frames and 7 wheels. How many different bikes can you make?

- 9 8 flavors and 3 cones. How many different ice creams can you make?

- 10 9 flavors and 4 cones. How many different ice creams can you make?



Power Pack · Statistics and probability — Answer key



Mean

- | | | | |
|--------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| 1. Mean of 30, 28, 11, 5, 11
= 17 | 2. Mean of 50, 32, 26, 32,
40 = 36 | 3. Mean of 16, 48, 1, 19, 1 =
17 | 4. Mean of 16, 25, 25, 50, 9
= 25 |
| 5. Mean of 49, 18, 6, 31, 31
= 27 | 6. Mean of 20, 21, 21, 5, 8 =
15 | 7. Mean of 27, 35, 27, 50,
21 = 32 | 8. Mean of 26, 38, 19, 19,
13 = 23 |
| 9. Mean of 21, 21, 7, 10, 26
= 17 | 10. Mean of 10, 28, 10, 6,
31 = 17 | | |

Median

- | | | | |
|---|---|--|---|
| 1. Median of 32, 5, 5, 38, 25
= 25 | 2. Median of 36, 32, 42, 28,
32 = 32 | 3. Median of 29, 39, 1, 10, 1
= 10 | 4. Median of 48, 44, 34, 48,
21 = 44 |
| 5. Median of 43, 32, 10, 43,
7 = 32 | 6. Median of 36, 14, 41, 14,
25 = 25 | 7. Median of 42, 24, 6, 34,
24 = 24 | 8. Median of 45, 13, 45, 20,
27 = 27 |
| 9. Median of 24, 33, 26, 24,
28 = 26 | 10. Median of 31, 38, 22, 7,
7 = 22 | | |

Mode

- | | | | |
|---------------------------------------|--|---------------------------------------|------------------------------------|
| 1. Mode of 43, 24, 17, 43,
28 = 43 | 2. Mode of 23, 27, 1, 8, 1 =
1 | 3. Mode of 35, 38, 38, 30,
44 = 38 | 4. Mode of 6, 6, 22, 12, 39 =
6 |
| 5. Mode of 19, 39, 37, 26,
39 = 39 | 6. Mode of 44, 44, 4, 50, 48
= 44 | 7. Mode of 29, 6, 48, 48, 14
= 48 | 8. Mode of 5, 33, 2, 5, 45 =
5 |
| 9. Mode of 22, 1, 22, 40, 10
= 22 | 10. Mode of 14, 26, 40, 26,
19 = 26 | | |

Range

- | | | | |
|--|---|--|--|
| 1. Range of 16, 26, 28, 17,
28 = 12 | 2. Range of 2, 1, 9, 1, 27 =
26 | 3. Range of 32, 46, 46, 14,
37 = 32 | 4. Range of 48, 45, 33, 33,
11 = 37 |
| 5. Range of 22, 17, 22, 12, 7
= 15 | 6. Range of 3, 28, 3, 22, 49
= 46 | 7. Range of 6, 22, 42, 22, 23
= 36 | 8. Range of 43, 13, 12, 43,
24 = 31 |
| 9. Range of 6, 24, 14, 14, 47
= 41 | 10. Range of 18, 19, 18, 34,
11 = 23 | | |



Probability

- | | | | |
|--|---|--|--|
| 1. 2 red, 3 blue, 7 green →
$P(\text{not blue}) = 3/4$ | 2. 3 red, 2 blue, 7 green →
$P(\text{not blue}) = 5/6$ | 3. 3 red, 9 blue → $P(\text{red}) = 1/4$ | 4. 4 red, 4 blue, 4 green →
$P(\text{blue}) = 1/3$ |
| 5. 3 red, 5 blue, 4 green →
$P(\text{green}) = 1/3$ | 6. 10 red, 2 blue → $P(\text{red}) = 5/6$ | 7. 4 red, 4 blue, 4 green →
$P(\text{not green}) = 2/3$ | 8. 4 red, 5 blue, 3 green →
$P(\text{green}) = 1/4$ |
| 9. 2 red, 2 blue, 8 green →
$P(\text{not green}) = 1/3$ | 10. 5 red, 4 blue, 3 green →
$P(\text{not green}) = 3/4$ | | |

Predict counts

- | | | | |
|--|--|---|---|
| 1. $P(\text{red}) = 17/20$. In 80 spins, how many land on red? → 68 | 2. $P(\text{a win}) = 1/2$. In 300 games, how many are wins? → 150 | 3. $P(\text{a win}) = 6/25$. In 200 games, how many are wins? → 48 | 4. $P(\text{heads}) = 1/4$. In 60 flips, how many are heads? → 15 |
| 5. $P(\text{blue}) = 8/10$. In 80 draws, how many are blue? → 64 | 6. $P(\text{heads}) = 3/4$. In 100 flips, how many are heads? → 75 | 7. $P(\text{red}) = 1/2$. In 50 spins, how many land on red? → 25 | 8. $P(\text{a win}) = 17/20$. In 20 games, how many are wins? → 17 |
| 9. $P(\text{blue}) = 1/4$. In 100 draws, how many are blue? → 25 | 10. $P(\text{a win}) = 23/25$. In 300 games, how many are wins? → 276 | | |

Counting

- | | | | |
|--|---|---|---|
| 1. 6 flavors and 2 cones. How many different ice creams can you make? → 12 | 2. 4 flavors and 2 cones. How many different ice creams can you make? → 8 | 3. 5 frames and 7 wheels. How many different bikes can you make? → 35 | 4. 5 frames and 3 wheels. How many different bikes can you make? → 15 |
| 5. 9 shirts and 6 shorts. How many different outfits can you make? → 54 | 6. 8 frames and 9 wheels. How many different bikes can you make? → 72 | 7. 8 mains and 6 sides. How many different meals can you make? → 48 | 8. 2 frames and 7 wheels. How many different bikes can you make? → 14 |
| 9. 8 flavors and 3 cones. How many different ice creams can you make? → 24 | 10. 9 flavors and 4 cones. How many different ice creams can you make? → 36 | | |