

**Q4 (Probability) Day 45**      **Name:** \_\_\_\_\_

---

1. A teacher has **six cards**. On the cards are the numbers from **1-6**. They pick a card at **random** from the deck. Look at the statements below.

- Outcome A = They pick an **odd number**.
- Outcome B = They pick a **number more than 6**.
- Outcome C = They pick a **multiple of 2**.
- Outcome D = They pick a **number more than 1**.

a) Which outcome is **most likely**? Write your answer in the space below.

Outcome \_\_\_\_\_

b) Which **two outcomes** are **equally likely**? Write your answers in the spaces below.

Outcome \_\_\_\_\_ and Outcome \_\_\_\_\_

---

2. A teacher has **six cards**. On the cards are the numbers from **1-6**. They pick a card at **random** from the deck. Look at the statements below.

- Outcome A = They pick a **triangular number less than 6**.
- Outcome B = They pick a **factor of 6**.
- Outcome C = They pick a **multiple of 4**.
- Outcome D = They pick a **square number**.

a) Which outcome is **least likely**? Write your answer in the space below.

Outcome \_\_\_\_\_

b) Which **two outcomes** are **equally likely**? Write your answers in the spaces below.

Outcome \_\_\_\_\_ and Outcome \_\_\_\_\_

---

3. A teacher has **six cards**. On the cards are the numbers from **1-6**. They pick a card at **random** from the deck. Look at the statements below.

- Outcome A = They pick an **odd number above 2**.
- Outcome B = They pick a **4 or 6**.
- Outcome C = They pick a **multiple of 2**.
- Outcome D = They pick a **square number or a multiple of 3**.

a) Which outcome is **most likely**? Write your answer in the space below.

Outcome \_\_\_\_\_

b) Which **two outcomes** are **equally likely**? Write your answers in the spaces below.

Outcome \_\_\_\_\_ and Outcome \_\_\_\_\_

---

4. A teacher has **eight cards**. On the cards are the numbers from **1-8**. They pick a card at **random** from the deck. Look at the statements below.

- Outcome A = They pick an **even number**.
- Outcome B = They pick a **prime number**.
- Outcome C = They pick a **multiple of 5**.
- Outcome D = They pick a **cubed number**.

a) Which outcome is **least likely**? Write your answer in the space below.

Outcome \_\_\_\_\_

b) Which **two outcomes** are **equally likely**? Write your answers in the spaces below.

Outcome \_\_\_\_\_ and Outcome \_\_\_\_\_

---

5. A teacher has **eight cards**. On the cards are the numbers from **1-8**. They pick a card at **random** from the deck. Look at the statements below.

- Outcome A = They pick an **odd number less than 3**.
- Outcome B = They pick a **factor of 8**.
- Outcome C = They pick a **multiple of 7**.
- Outcome D = They pick a **number below 7**.

a) Which outcome is **most likely**? Write your answer in the space below.

Outcome \_\_\_\_\_

b) Which **two outcomes** are **equally likely**? Write your answers in the spaces below.

Outcome \_\_\_\_\_ and Outcome \_\_\_\_\_

---

6. A teacher has **eight cards**. On the cards are the numbers from **1-8**. They pick a card at **random** from the deck. Look at the statements below.

- Outcome A = They pick a **multiple of 2**.
- Outcome B = They pick a **prime number more than 2**.
- Outcome C = They pick a **triangular number**.
- Outcome D = They pick a **number above 7**.

a) Which outcome is **least likely**? Write your answer in the space below.

Outcome \_\_\_\_\_

b) Which **two outcomes** are **equally likely**? Write your answers in the spaces below.

Outcome \_\_\_\_\_ and Outcome \_\_\_\_\_

---

7. A teacher has **ten cards**. On the cards are the numbers from **1-10**. They pick a card at **random** from the deck. Look at the statements below.

- Outcome A = They pick a **factor of 10 or 8**.
- Outcome B = They pick a **prime number less than 7**.
- Outcome C = They pick a **multiple of 6**.
- Outcome D = They pick a **square number**.

a) Which outcome is **most likely**? Write your answer in the space below.

Outcome \_\_\_\_\_

b) Which **two outcomes** are **equally likely**? Write your answers in the spaces below.

Outcome \_\_\_\_\_ and Outcome \_\_\_\_\_

---

8. A teacher has **ten cards**. On the cards are the numbers from **1-10**. They pick a card at **random** from the deck. Look at the statements below.

- Outcome A = They pick an **odd number**.
- Outcome B = They pick a **prime number more than 5**.
- Outcome C = They pick a **multiple of 4**.
- Outcome D = They pick a **cubed number**.

a) Which outcome is **least likely**? Write your answer in the space below.

Outcome \_\_\_\_\_

b) Which **two outcomes** are **equally likely**? Write your answers in the spaces below.

Outcome \_\_\_\_\_ and Outcome \_\_\_\_\_

---

9. A teacher has **ten cards**. On the cards are the numbers from **1-10**. They pick a card at **random** from the deck. Look at the statements below.

- Outcome A = They pick an **even number less than 8**.
- Outcome B = They pick a **prime number less than 5**.
- Outcome C = They pick a **multiple of 2 or 5**.
- Outcome D = They pick a **square number**.

a) Which outcome is **most likely**? Write your answer in the space below.

Outcome \_\_\_\_\_

b) Which **two outcomes** are **equally likely**? Write your answers in the spaces below.

Outcome \_\_\_\_\_ and Outcome \_\_\_\_\_

---

10. A teacher has **twelve cards**. On the cards are the numbers from **1-12**. They pick a card at **random** from the deck. Look at the statements below.

- Outcome A = They pick a **prime number or a multiple of 10**.
- Outcome B = They pick a **factor of 12**.
- Outcome C = They pick a **multiple of 3**.
- Outcome D = They pick a **square number**.

a) Which outcome is **least likely**? Write your answer in the space below.

Outcome \_\_\_\_\_

b) Which **two outcomes** are **equally likely**? Write your answers in the spaces below.

Outcome \_\_\_\_\_ and Outcome \_\_\_\_\_

---

11. A teacher has **twelve cards**. On the cards are the numbers from **1-12**. They pick a card at **random** from the deck. Look at the statements below.

- Outcome A = They pick a **cubed number**.
- Outcome B = They pick a **factor of 12**.
- Outcome C = They pick a **multiple of 5**.
- Outcome D = They pick a **triangular number**.

a) Which outcome is **most likely**? Write your answer in the space below.

Outcome \_\_\_\_\_

b) Which **two outcomes** are **equally likely**? Write your answers in the spaces below.

Outcome \_\_\_\_\_ and Outcome \_\_\_\_\_

---

12. A teacher has **twelve cards**. On the cards are the numbers from **1-12**. They pick a card at **random** from the deck. Look at the statements below.

- Outcome A = They pick an **odd number or a cubed number above 1**.
- Outcome B = They pick a **triangular** number.
- Outcome C = They pick a **multiple of 4**.
- Outcome D = They pick a **prime number or square number above 4**.

a) Which outcome is **least likely**? Write your answer in the space below.

Outcome \_\_\_\_\_

b) Which **two outcomes** are **equally likely**? Write your answers in the spaces below.

Outcome \_\_\_\_\_ and Outcome \_\_\_\_\_

---

**Answers**

- |                |                   |
|----------------|-------------------|
| <b>1. a) D</b> | <b>b) A and C</b> |
| <b>2. a) C</b> | <b>b) A and D</b> |
| <b>3. a) D</b> | <b>b) A and B</b> |
| <b>4. a) C</b> | <b>b) A and B</b> |
| <b>5. a) D</b> | <b>b) A and C</b> |
| <b>6. a) D</b> | <b>b) B and C</b> |
| <b>7. a) A</b> | <b>b) B and D</b> |
| <b>8. a) B</b> | <b>b) C and D</b> |
| <b>9. a) C</b> | <b>b) A and D</b> |
| <b>10.a) D</b> | <b>b) A and B</b> |
| <b>11.a) B</b> | <b>b) A and C</b> |
| <b>12.a) C</b> | <b>b) A and D</b> |