

## Simple probability - packs of cards

|       |        |       |
|-------|--------|-------|
| Name: | Class: | Date: |
|-------|--------|-------|

|      |     |   |
|------|-----|---|
| Mark | / 6 | % |
|------|-----|---|

1) If you select a card at random from a standard pack of 52 playing cards (ace is counted as 1), find the probability of choosing

a) a six of Diamonds

b) a Club

c) a six

[1]

2) If you select a card at random from a standard pack of 52 playing cards (ace is counted as 1), find the probability of choosing

a) an Ace of Diamonds

b) a Heart

c) an Ace

[1]

3) If you select a card at random from a standard pack of cards (ace is counted as 1), find the probability of choosing

a) a Jack of Hearts

b) a Heart or Club

c) a number smaller than 8

[1]

4) If you select a card at random from a standard pack of cards (ace is counted as 1), find the probability of choosing

a) an Ace of Spades

b) a Club or Spade

c) a number smaller than 9

[1]

5) A card is drawn randomly from a standard 52-card deck.

[1]

Find the probability that the card drawn is

a) a spade or two

b) a jack or club

c) a three or red card

6) A card is drawn randomly from a standard 52-card deck.

[1]

Find the probability that the card drawn is

a) a diamond or eight

b) a king or heart

c) a five or black card

### Solutions for the assessment Simple probability - packs of cards

1) a)  $P(\text{a six of Diamonds}) = \frac{1}{52}$

b)  $P(\text{a Club}) = \frac{1}{4}$

c)  $P(\text{a six}) = \frac{1}{13}$

2) a)  $P(\text{an Ace of Diamonds}) = \frac{1}{52}$

b)  $P(\text{a Heart}) = \frac{1}{4}$

c)  $P(\text{an Ace}) = \frac{1}{13}$

3) a)  $P(\text{a Jack of Hearts}) = \frac{1}{52}$

b)  $P(\text{a Heart or Club}) = \frac{1}{2}$

c)  $P(\text{a number smaller than 8}) = \frac{7}{13}$

4) a)  $P(\text{an Ace of Spades}) = \frac{1}{52}$

b)  $P(\text{a Club or Spade}) = \frac{1}{2}$

c)  $P(\text{a number smaller than 9}) = \frac{8}{13}$

5) a)  $P(\text{a spade or two}) = \frac{4}{13}$

b)  $P(\text{a jack or club}) = \frac{4}{13}$

c)  $P(\text{a three or red card}) = \frac{7}{13}$

6) a)  $P(\text{a diamond or eight}) = \frac{4}{13}$

b)  $P(\text{a king or heart}) = \frac{4}{13}$

c)  $P(\text{a five or black card}) = \frac{7}{13}$