#### Activity 4.8.2: Solving Problems Involving Probabilities of **Simple Events**

Total points = 20

1. 
$$P(\text{number} > 4) = \frac{n(\text{number} > 4)}{n(S)} \checkmark = \frac{2}{6} \checkmark = \frac{1}{3} \checkmark$$

2. 
$$P(\text{number} < 4) = \frac{n(\text{number} < 4)}{n(S)} \checkmark = \frac{3}{6} \checkmark = \frac{1}{2} \checkmark$$
  
3.  $P(\text{even prime}) = \frac{n(\text{even prime})}{n(S)} \checkmark = \frac{4}{16} \checkmark = \frac{1}{4} \checkmark$   
4.  $P(8) = \frac{n(8)}{16} \checkmark = \frac{4}{16} \checkmark = \frac{1}{16} \checkmark$ 

3. 
$$P(\text{even prime}) = \frac{n(\text{even prime})}{n(S)} \checkmark = \frac{4}{16} \checkmark = \frac{1}{4} \checkmark$$

4. 
$$P(8) = \frac{n(8)}{n(S)} \checkmark = \frac{4}{52} \checkmark = \frac{1}{13} \checkmark$$

5. 
$$P(\text{sum at most 4}) = \frac{n(\text{sum at most 4})}{n(S)} \checkmark = \frac{6}{36} \checkmark = \frac{1}{6} \checkmark$$

6. 
$$P(\text{sum at least } 10) = \frac{n(\text{sum at least } 10)}{n(S)} \checkmark = \frac{6}{36} \checkmark = \frac{1}{6} \checkmark$$
7.  $P(\text{consonant}) = \frac{n(\text{consonant})}{n(S)} \checkmark = \frac{9}{11} \checkmark$ 

7. 
$$P(\text{consonant}) = \frac{n(\text{consonant})}{n(S)} \checkmark = \frac{9}{11} \checkmark$$

# Activity 4.8.2: Solving Problems Involving Probabilities of

**Simple Events** Total points = 20

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2. 
$$P(\text{number} < 4) = \frac{n(\text{number} < 4)}{n(S)} \checkmark = \frac{3}{6} \checkmark = \frac{1}{2} \checkmark$$

1. 
$$P(\text{number} > 4) = \frac{n(\text{number} > 4)}{n(S)} \checkmark = \frac{2}{6} \checkmark = \frac{1}{3} \checkmark$$
2.  $P(\text{number} < 4) = \frac{n(\text{number} < 4)}{n(S)} \checkmark = \frac{3}{6} \checkmark = \frac{1}{2} \checkmark$ 
3.  $P(\text{even prime}) = \frac{n(\text{even prime})}{n(S)} \checkmark = \frac{4}{16} \checkmark = \frac{1}{4} \checkmark$ 

4. 
$$P(8) = \frac{n(8)}{n(S)} \checkmark = \frac{4}{52} \checkmark = \frac{1}{13} \checkmark$$

5. 
$$P(\text{sum at most 4}) = \frac{n(\text{sum at most 4})}{n(S)} \checkmark = \frac{6}{36} \checkmark = \frac{1}{6} \checkmark$$

4. 
$$P(6) = \frac{1}{n(S)} \checkmark = \frac{1}{52} \checkmark = \frac{1}{13} \checkmark$$
5.  $P(\text{sum at most 4}) = \frac{n(\text{sum at most 4})}{n(S)} \checkmark = \frac{6}{36} \checkmark = \frac{1}{6} \checkmark$ 
6.  $P(\text{sum at least 10}) = \frac{n(\text{sum at least 10})}{n(S)} \checkmark = \frac{6}{36} \checkmark = \frac{1}{6} \checkmark$ 
7.  $P(\text{consonant}) = \frac{n(\text{consonant})}{n(S)} \checkmark = \frac{9}{11} \checkmark$ 

7. 
$$P(consonant) = \frac{n(consonant)}{n(s)} \checkmark = \frac{9}{11}$$

# Activity 4.8.2: Solving Problems Involving Probabilities of Simple Events

Total points = 20

1. 
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4.  $P(8) = \frac{n(8)}{n(S)} \checkmark = \frac{4}{52} \checkmark = \frac{1}{13} \checkmark$ 

2. 
$$P(\text{number} < 4) = \frac{n(\text{number} < 4)}{n(S)} \checkmark = \frac{3}{6} \checkmark = \frac{1}{2} \checkmark$$

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$$P(\text{even prime}) = \frac{n(\text{even prime})}{n(S)} \checkmark = \frac{4}{16} \checkmark = \frac{1}{4} \checkmark$$

4. 
$$P(8) = \frac{n(8)}{n(S)} \checkmark = \frac{4}{52} \checkmark = \frac{1}{13} \checkmark$$

5. 
$$P(\text{sum at most 4}) = \frac{n(\text{sum at most 4})}{n(S)} \checkmark = \frac{6}{36} \checkmark = \frac{1}{6} \checkmark$$
6.  $P(\text{sum at least 10}) = \frac{n(\text{sum at least 10})}{n(S)} \checkmark = \frac{6}{36} \checkmark = \frac{1}{6} \checkmark$ 
7.  $P(\text{consonant}) = \frac{n(\text{consonant})}{n(S)} \checkmark = \frac{9}{11} \checkmark$ 

6. 
$$P(\text{sum at least } 10) = \frac{n(\text{sum at least } 10)}{n(S)} \checkmark = \frac{6}{36} \checkmark = \frac{1}{6} \checkmark$$

7. 
$$P(\text{consonant}) = \frac{n(\text{consonant})}{n(S)} \checkmark = \frac{9}{11} \checkmark$$

### Activity 4.8.2: Solving Problems Involving Probabilities of Simple Events

Total points = 20

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4. 
$$P(8) = \frac{n(8)}{n(8)} \checkmark = \frac{4}{52} \checkmark = \frac{1}{13} \checkmark$$

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# Activity 4.8.2: Solving Problems Involving Probabilities of **Simple Events**

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4. 
$$P(8) = \frac{n(8)}{n(S)} \checkmark = \frac{4}{52} \checkmark = \frac{1}{13} \checkmark$$

5. 
$$P(\text{sum at most 4}) = \frac{n(\text{sum at most 4})}{n(S)} \checkmark = \frac{6}{36} \checkmark = \frac{1}{6} \checkmark$$

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$$P(\text{sum at least } 10) = \frac{n(\text{sum at least } 10)}{n(S)} \checkmark = \frac{6}{36} \checkmark = \frac{1}{6} \checkmark$$
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4. 
$$P(8) = \frac{r(S)}{n(S)} \checkmark = \frac{1}{52} \checkmark = \frac{1}{13} \checkmark$$
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7. 
$$P(consonant) = \frac{n(s) n(s)}{n(s)} \checkmark = \frac{7}{11}$$