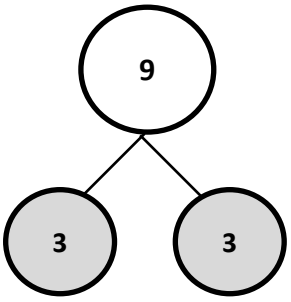
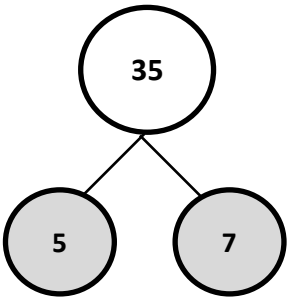
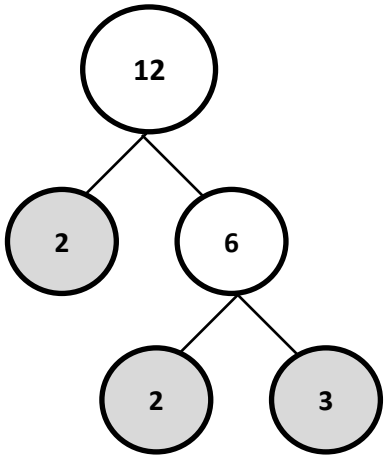
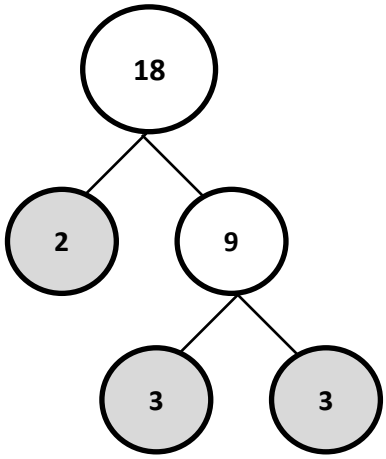
Answer 2 – Prime Factors

Find the prime factors for the following numbers.

Prime Factor of 9  	• Divide 9 by the prime factor 3 9 ÷ **3** = **3** **Prime Factor of 9** **3 x 3 = 9**
Prime Factor of 35  	• Divide 35 by the prime factor 5 35 ÷ **5** = **7** **Prime Factor of 35** **5 x 7 = 35**
Prime Factor of 12  	• Divide 12 by the prime factor 2 12 ÷ **2** = 6 • Divide 6 by the prime factor 2 6 ÷ **2** = **3** **Prime Factor of 12** **2 x 2 x 3 = 12**

Prime Factor of 18

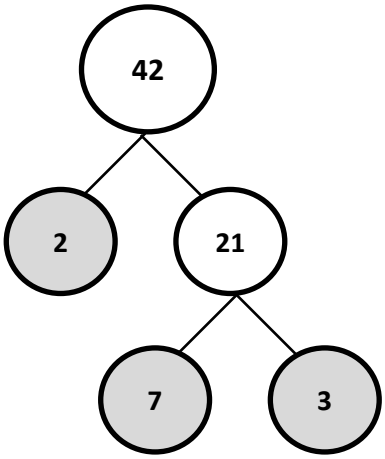


- Divide 18 by the prime factor 2
  18 ÷ **2** = 9
- Divide 9 by the prime factor 3
  9 ÷ **3** = **3**

Prime Factor of 18

2 x 3 x 3 = 18

Prime Factor of 42

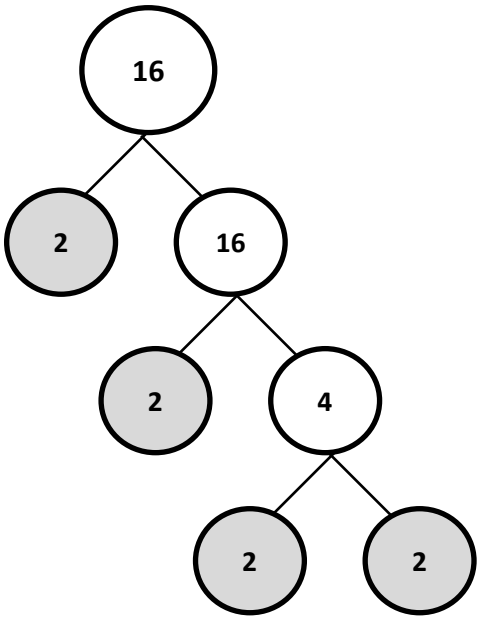


- Divide 42 by the prime factor 2
  42 ÷ **2** = 21
- Divide 21 by the prime factor 7
  21 ÷ **7** = **3**

Prime Factor of 42

2 x 3 x 7 = 42

Prime Factor of 16

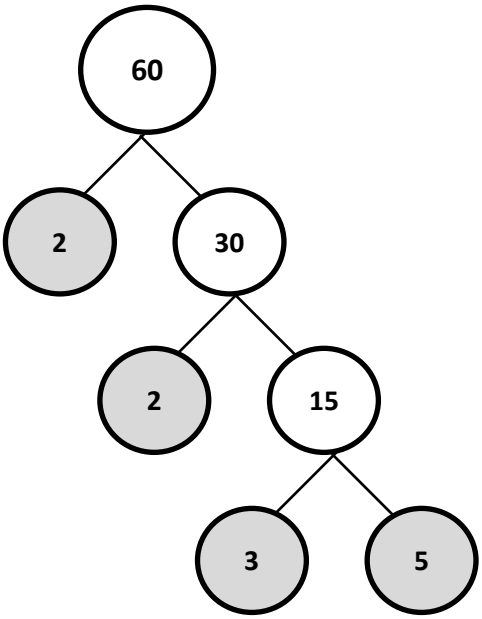


- Divide 16 by the prime factor 2
  16 ÷ **2** = 8
- Divide 8 by the prime factor 2
  8 ÷ **2** = **4**
- Divide 4 by the prime factor 2
  4÷ **2** = **2**

Prime Factor of 16

2 x 2 x 2 x 2 = 16

Prime Factor of 60

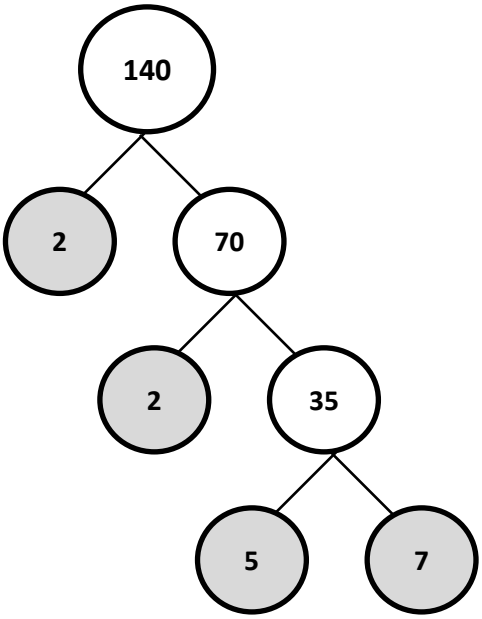


- Divide 60 by the prime factor 2
  60 ÷ **2** = 30
- Divide 30 by the prime factor 2
  30 ÷ **2** = 15
- Divide 15 by the prime factor 3
  15 ÷ **3** = **5**

Prime Factor of 60

2 x 2 x 3 x 5 = 60

Prime Factor of 140



- Divide 140 by the prime factor 2
  140 ÷ **2** = 70
- Divide 70 by the prime factor 2
  70 ÷ **2** = 35
- Divide 35 by the prime factor 5
  35 ÷ **5** = **7**

Prime Factor of 140

2 x 2 x 5 x 7 = 140