

## Teilbarkeit

### **Aufgabe 1: Primfaktoren**

Bestimme die Primfaktorenzerlegung

1)  $90 =$

2)  $525 =$

3)  $1650 =$

4)  $315 =$

5)  $1540 =$

6)  $14 =$

7)  $132 =$

8)  $330 =$

### **Aufgabe 2: Teilmenge**

Bestimme die Teilmenge

1)  $24$

2)  $40$

3)  $27$

4)  $56$

5)  $8$

6)  $175$

7)  $18$

8)  $135$

### **Aufgabe 3: Teilmenge**

Bestimme die Teilmenge

1)  $105 = 3 \cdot 5 \cdot 7$

2)  $24 = 2 \cdot 2 \cdot 2 \cdot 3$

3)  $90 = 2 \cdot 3 \cdot 3 \cdot 5$

4)  $28 = 2 \cdot 2 \cdot 7$

5)  $36 = 2 \cdot 2 \cdot 3 \cdot 3$

6)  $60 = 2 \cdot 2 \cdot 3 \cdot 5$

7)  $525 = 3 \cdot 5 \cdot 5 \cdot 7$

8)  $12 = 2 \cdot 2 \cdot 3$

### **Lösungen:**

1)  $90 = 2 \cdot 3 \cdot 3 \cdot 5$

2)  $525 = 3 \cdot 5 \cdot 5 \cdot 7$

3)  $1650 = 2 \cdot 3 \cdot 5 \cdot 5 \cdot 11$

4)  $315 = 3 \cdot 3 \cdot 5 \cdot 7$

5)  $1540 = 2 \cdot 2 \cdot 5 \cdot 7 \cdot 11$

6)  $14 = 2 \cdot 7$

7)  $132 = 2 \cdot 2 \cdot 3 \cdot 11$

8)  $330 = 2 \cdot 3 \cdot 5 \cdot 11$

1)  $T = \{1, 2, 3, 4, 6, 8, 12, 24\}$

2)  $T = \{1, 2, 4, 5, 8, 10, 20, 40\}$

3)  $T = \{1, 3, 9, 27\}$

4)  $T = \{1, 2, 4, 7, 8, 14, 28, 56\}$

5)  $T = \{1, 2, 4, 8\}$

6)  $T = \{1, 5, 7, 25, 35, 175\}$

7)  $T = \{1, 2, 3, 6, 9, 18\}$

8)  $T = \{1, 3, 5, 9, 15, 27, 45, 135\}$

1)  $T = \{1, 3, 5, 7, 15, 21, 35, 105\}$

2)  $T = \{1, 2, 3, 4, 6, 8, 12, 24\}$

3)  $T = \{1, 2, 3, 5, 6, 9, 10, 15, 18, 30, 45, 90\}$

4)  $T = \{1, 2, 4, 7, 14, 28\}$

5)  $T = \{1, 2, 3, 4, 6, 9, 12, 18, 36\}$

6)  $T = \{1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60\}$

7)  $T = \{1, 3, 5, 7, 15, 21, 25, 35, 75, 105, 175, 525\}$

8)  $T = \{1, 2, 3, 4, 6, 12\}$