**1.** Schreibe die gefärbten Anteile als Bruch.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **a)**  |  | **b)** |  | **c)** |  | **d)** |  |
|  | \_\_\_\_\_\_\_\_ |  | \_\_\_\_\_\_\_ |  | rot: \_\_\_\_\_\_\_\_blau: \_\_\_\_\_\_grün: \_\_\_\_\_\_ |  | rot: \_\_\_\_\_\_\_\_blau: \_\_\_\_\_\_grün: \_\_\_\_\_\_ |

**2.** Schreibe die Anteile der roten und schwarzen Kugeln an allen Kugeln im Behälter jeweils als Bruch.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **a)** | \_\_\_\_\_\_ rote Kugeln von \_\_\_\_\_\_ Kugeln:

|  |  |  |
| --- | --- | --- |
|  | = |  |
| 10 | 5 |

\_\_\_\_\_ schwarze Kugeln von \_\_\_\_\_ Kugeln:

|  |  |  |
| --- | --- | --- |
|  | = |  |
| 10 | 5 |

 | **b)** | \_\_\_\_\_\_ rote Kugeln von \_\_\_\_\_\_ Kugeln:

|  |  |  |
| --- | --- | --- |
|  | = |  |
|  |  |

\_\_\_\_\_ schwarze Kugeln von \_\_\_\_\_ Kugeln:

|  |  |  |
| --- | --- | --- |
|  | = |  |
|  |  |

 |

**3.** Berechne.

 **a)** $\frac{1}{4}$ von 16 Mädchen: \_\_\_\_ Mädchen $\frac{3}{4}$ von 16 Mädchen: \_\_\_\_ Mädchen

 **b)** $\frac{1}{5}$ von 50 Jungen: \_\_\_\_ Jungen $\frac{4}{5}$ von 50 Jungen: \_\_\_\_ Jungen

 **c)** $\frac{1}{9}$ von 27 Befragten: \_\_\_\_ Befragte $\frac{5}{9}$ von 27 Befragten: \_\_\_\_ Befragte

 **d)** $\frac{4}{10}$ von 10 cm: \_\_\_\_ cm  **e)** $\frac{6}{7}$ von 42 cm: \_\_\_\_ cm  **f)** $\frac{5}{9}$ von 54 cm: \_\_\_\_ cm

**4.** Ordne jedem Bruch eine Dezimalzahl zu.

|  |  |
| --- | --- |
|  |  \_\_\_\_\_ = \_\_\_\_\_ \_\_\_\_\_ = \_\_\_\_\_ \_\_\_\_\_ = \_\_\_\_\_ \_\_\_\_\_ = \_\_\_\_\_ \_\_\_\_\_ = \_\_\_\_\_ |

**5.** Schreibe als Bruch oder als Dezimalzahl.

**a)**0,1= \_\_\_\_\_\_\_\_ **b)** $\frac{3}{10}$ = \_\_\_\_\_\_\_\_ **c)** 0,29 = \_\_\_\_\_\_\_\_

**d)** $\frac{73}{100}$ = \_\_\_\_\_\_\_\_ **e)** 0,215 = \_\_\_\_\_\_\_\_ **f)** $\frac{313}{1000}$ = \_\_\_\_\_\_\_\_

**g)** $\frac{89}{1000}$ = \_\_\_\_\_\_\_\_ **h)** 0,037 = \_\_\_\_\_\_\_\_

**6.** Wandle die Dezimalzahlen in Brüche um und kürze so weit wie möglich.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **a)** | 0,4 | = |  | = |  |  | **b)** | 0,8 | = |  | = |  |
|  |  |  |  |
|  |
| **c)** | 0,22 | = |  | = |  |  | **d)** | 0,35 | = |  | = |  |
|  |  |  |  |  |
|  |
| **e)** | 0,06 | = |  | = |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

**7.** Wandle die Brüche durch Erweitern oder Kürzen in Dezimalzahlen um.

**a)**$\frac{3}{5}$ = \_\_\_\_\_\_\_\_\_\_ $\frac{9}{50}$ = \_\_\_\_\_\_\_\_\_\_ $\frac{13}{25}$ = \_\_\_\_\_\_\_\_\_\_ $\frac{11}{500}$ = \_\_\_\_\_\_\_\_\_\_\_

**b)** $\frac{6}{20}$ = \_\_\_\_\_\_\_\_\_\_ $\frac{28}{40}$ = \_\_\_\_\_\_\_\_\_\_\_ $\frac{33}{300}$ = \_\_\_\_\_\_\_\_\_ $\frac{12}{6000}$ = \_\_\_\_\_\_\_\_\_\_

**8.** Tobias und Max haben in der Grundschule diese Zeugnisnoten erreicht. Berechne jeweils den Notendurchschnitt.

Tobias: 1; 2; 3; 3; 1; 2 Max: 3; 4; 4; 1; 1; 2

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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