Determine whether the ratios are equivalent. Write **yes** or **no**.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1. | $$\frac{4}{12}=\frac{1}{3}$$ | \_\_\_\_\_\_\_\_ |  | 6. | $$\frac{15}{50}=\frac{3}{5}$$ | \_\_\_\_\_\_\_\_ |
| 2. | $$\frac{6}{8}=\frac{9}{11}$$ | \_\_\_\_\_\_\_\_ |  | 7. | $$\frac{3}{12}=\frac{1}{10}$$ | \_\_\_\_\_\_\_\_ |
| 3. | $$\frac{20}{24}=\frac{10}{12}$$ | \_\_\_\_\_\_\_\_ |  | 8. | $$\frac{4}{20}=\frac{3}{15}$$ | \_\_\_\_\_\_\_\_ |
| 4. | $$\frac{1}{2}=\frac{2}{3}$$ | \_\_\_\_\_\_\_\_ |  | 9. | $$\frac{28}{32}=\frac{7}{8}$$ | \_\_\_\_\_\_\_\_ |
| 5. | $$\frac{5}{9}=\frac{35}{45}$$ | \_\_\_\_\_\_\_\_ |  | 10. | $$\frac{9}{6}=\frac{6}{4}$$ | \_\_\_\_\_\_\_\_ |
|  |  |  |  |  |  |  |

13. Luis stuffed 30 envelopes in 6 minutes. Cheryl stuffed 40 envelopes in 8 minutes.

 a. Fill in their ratios in the ratio table.

|  |  |  |
| --- | --- | --- |
|  | **Luis** | **Cheryl** |
| **Envelopes** | 30 |  |
| **Minutes** | 6 |  |

 b. Are Luis’s and Cheryl’s envelope stuffing rates equivalent? Yes No

 c. **Explain** your answer:

14. A 12-ounce jar of pickles costs $3.60. A 16-ounce jar costs $4.00.

 a. Fill in the ratios in the table.

|  |  |  |
| --- | --- | --- |
| **Cost** | 3.60 | $4.00 |
| **Ounces** |  |  |

 b. Are the rates equivalent? Yes No

 c. **Explain** your answer.

Find each missing value. You may use any method, but SHOW YOUR WORK!

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1. | $$\frac{∎}{12}=\frac{1}{2}$$ |  | 2. | $$\frac{5}{∎}=\frac{20}{32}$$ |  | 3. | $$\frac{3}{4}= \frac{∎}{36}$$ |
|  | \_\_\_\_\_\_\_\_ |  |  | \_\_\_\_\_\_\_\_ |  |  | \_\_\_\_\_\_\_\_ |
|  |  |  |  |  |  |  |  |
| 4. | $$\frac{∎}{40}=\frac{12}{20}$$ |  | 5. | $$\frac{15}{∎}=\frac{3}{4}$$ |  | 6. | $$\frac{21}{84}=\frac{3}{∎}$$ |
|  | \_\_\_\_\_\_\_\_ |  |  | \_\_\_\_\_\_\_\_ |  |  | \_\_\_\_\_\_\_\_ |
|  |  |  |  |  |  |  |  |
| 7. | $$\frac{40}{12}= \frac{∎}{30}$$ |  | 8. | $$\frac{∎}{4}=\frac{25}{10}$$ |  | 9. | $$\frac{10}{30}= \frac{∎}{6}$$ |
|  | \_\_\_\_\_\_\_\_ |  |  | \_\_\_\_\_\_\_\_ |  |  | \_\_\_\_\_\_\_\_ |
|  |  |  |  |  |  |  |  |

Write a proportion to solve.

10. A fish tank has 12 angelfish. For every 8 fish, 3 of them are angelfish. Fill in the missing values in the proportion below, and find out how many fish are in the tank.

$$\frac{12}{?}=\frac{}{}$$

**KEY**

Determine whether the ratios are equivalent. Write yes or no.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1. | $$\frac{4}{12}=\frac{1}{3}$$ | **YES** |  | 7. | $$\frac{15}{50}=\frac{12}{40}$$ | **YES** |
| 2. | $$\frac{6}{8}=\frac{9}{11}$$ | **NO** |  | 8. | $$\frac{3}{12}=\frac{1}{10}$$ | **NO** |
| 3. | $$\frac{20}{24}=\frac{10}{12}$$ | **YES** |  | 9. | $$\frac{4}{20}=\frac{3}{15}$$ | **YES** |
| 4. | $$\frac{1}{2}=\frac{2}{3}$$ | **NO** |  | 9. | $$\frac{28}{32}=\frac{7}{8}$$ | **YES** \_ |
| 5. | $$\frac{5}{9}=\frac{35}{45}$$ | **NO** |  | 10. | $$\frac{9}{6}=\frac{6}{4}$$ | **YES** |
|  |  |  |  |  |  |  |

13. Luis stuffed 30 envelopes in 6 minutes. Cheryl stuffed 40 envelopes in 8 minutes.

 a. Fill in their ratios in the ratio table.

|  |  |  |
| --- | --- | --- |
|  | **Luis** | **Cheryl** |
| **Envelopes** | 30 | **40** |
| **Minutes** | 6 | **8** |

 b. Are Luis’s and Cheryl’s envelope stuffing rates equivalent? **Yes** No

 c. **Explain** your answer: **Both of them have a rate of 5 envelopes per minute.**

14. A 12-ounce jar of pickles costs $3.60. A 16-ounce jar costs $4.00.

 a. Fill in the ratios in the table.

|  |  |  |
| --- | --- | --- |
| **Cost** | 3.60 | $4.00 |
| **Ounces** | **12** | **16** |

 b. Are the rates equivalent? Yes **No**

 c. **Explain** your answer. **The unit rates are $0.30 per ounce and $0.25 per ounce.**

**KEY**

Find each missing value. You may use any method, but SHOW YOUR WORK!

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1. | $$\frac{∎}{12}=\frac{1}{2}$$ |  | 2. | $$\frac{5}{∎}=\frac{20}{32}$$ |  | 3. | $$\frac{3}{4}= \frac{∎}{36}$$ |
|  |  **6**\_\_\_\_\_\_\_\_ |  |   |  **8**\_\_\_\_\_\_\_\_ |  |  |  **27**\_\_\_\_\_\_\_\_ |
|  |  |  |  |  |  |  |  |
| 4. | $$\frac{∎}{40}=\frac{12}{20}$$ |  | 5. | $$\frac{15}{∎}=\frac{3}{4}$$ |  | 6. | $$\frac{21}{84}=\frac{3}{∎}$$ |
|  |  **24**\_\_\_\_\_\_\_\_ |  |  |  **20**\_\_\_\_\_\_\_\_ |  |  |  **12**\_\_\_\_\_\_\_\_ |
|  |  |  |  |  |  |  |  |
| 7. | $$\frac{40}{12}= \frac{∎}{30}$$ |  | 8. | $$\frac{∎}{4}=\frac{25}{10}$$ |  | 9. | $$\frac{10}{30}= \frac{∎}{6}$$ |
|  |  **100**\_\_\_\_\_\_\_\_ |  |  |   **10**\_\_\_\_\_\_\_\_ |  |  |   **2**\_\_\_\_\_\_\_\_ |
|  |  |  |  |  |  |  |  |

Write a proportion to solve.

10. A fish tank has 12 angelfish. For every 8 fish, 3 of them are angelfish. Fill in the missing values in the proportion below, and find out how many fish are in the tank.

$$\frac{12}{?}=\frac{3}{8}$$

**There are 32 fish in all.**