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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1. | $$\frac{4}{12}=\frac{1}{3}$$ | \_\_\_\_\_\_\_\_ |  | 7. | $$\frac{15}{50}=\frac{12}{40}$$ | \_\_\_\_\_\_\_\_ |
| 2. | $$\frac{6}{8}=\frac{9}{11}$$ | \_\_\_\_\_\_\_\_ |  | 8. | $$\frac{3}{12}=\frac{1}{10}$$ | \_\_\_\_\_\_\_\_ |
| 3. | $$\frac{20}{24}=\frac{10}{12}$$ | \_\_\_\_\_\_\_\_ |  | 9. | $$\frac{4}{20}=\frac{3}{15}$$ | \_\_\_\_\_\_\_\_ |
| 4. | $$\frac{11}{22}=\frac{21}{31}$$ | \_\_\_\_\_\_\_\_ |  | 10 | $$\frac{8}{14}=\frac{12}{21}$$ | \_\_\_\_\_\_\_\_ |
| 5. | $$\frac{27}{45}=\frac{18}{30}$$ | \_\_\_\_\_\_\_\_ |  | 11. | $$\frac{12}{18}=\frac{14}{21}$$ | \_\_\_\_\_\_\_\_ |
| 6. | $$\frac{28}{32}=\frac{7}{8}$$ | \_\_\_\_\_\_\_\_ |  | 12. | $$\frac{35}{45}=\frac{5}{9}$$ | \_\_\_\_\_\_\_\_ |

13. Luis stuffed 30 envelopes in 6 minutes. Cheryl stuffed 40 envelopes in 8 minutes. Write two ratios and use them to find out whether their envelope stuffing rates are equivalent.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14. A 12-ounce jar of olives costs $3.60. A 16-ounce jar costs $4.00. Write two ratios and use them to see whether the prices of the two sizes of olive jars are equivalent.

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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. | $$\frac{40}{48}= \frac{∎}{30}$$ |  | 8. | $$\frac{∎}{36}=\frac{25}{45}$$ |  | 9. | $$\frac{10}{30}= \frac{∎}{96}$$ |
|  | \_\_\_\_\_\_\_\_ |  |  | \_\_\_\_\_\_\_\_ |  |  | \_\_\_\_\_\_\_\_ |
|  |  |  |  |  |  |  |  |

Write a proportion to solve.

10. A fish tank has 12 angelfish. For every 8 fish, 3 of them are angelfish. How many fish are in the tank?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. One yard is 36 inches. How many inches is $\frac{2}{3}$ of a yard?

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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. | $$\frac{11}{22}=\frac{21}{31}$$ | **NO** |  | 10 | $$\frac{8}{14}=\frac{12}{21}$$ | **YES** |
| 5. | $$\frac{27}{45}=\frac{18}{30}$$ | **YES** |  | 11. | $$\frac{12}{18}=\frac{14}{21}$$ | **YES** |
| 6. | $$\frac{28}{32}=\frac{7}{8}$$ | **YES** |  | 12. | $$\frac{35}{45}=\frac{5}{9}$$ | **NO** |

13. Luis stuffed 30 envelopes in 6 minutes. Cheryl stuffed 40 envelopes in 8 minutes. Write two ratios and use them to find out whether their envelope stuffing rates are equivalent.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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. | $$\frac{40}{48}= \frac{∎}{30}$$ |  | 8. | $$\frac{∎}{36}=\frac{25}{45}$$ |  | 9. | $$\frac{10}{30}= \frac{∎}{96}$$ |
|  | \_\_\_\_\_\_\_\_ |  |  | \_\_\_\_\_\_\_\_ |  |  | \_\_\_\_\_\_\_\_ |
|  |  |  |  |  |  |  |  |

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