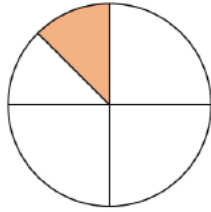


Year 7 Core- Addition and Subtraction of Fractions Answers

1. Explain why this diagram does not show $\frac{1}{5}$



It is not split into equal parts.

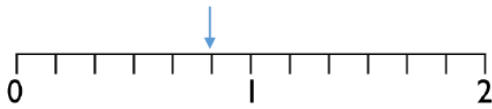
2.

$$\frac{3}{5} = \frac{\boxed{6}}{10}$$



You may use the bar model to help you.

3. What fraction is the arrow pointing to?



$$\underline{\frac{5}{6}}$$

What do you need to add to this fraction to make 2?

$$\underline{1\frac{1}{6}}$$

4.

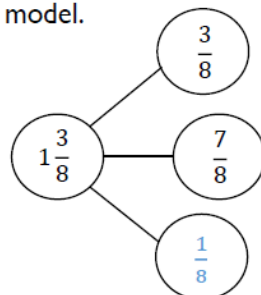
Calculate.

$$\frac{3}{8} + \frac{1}{8} + \frac{1}{8} = \underline{\frac{5}{8}}$$

$$\frac{5}{7} - \frac{2}{7} = \underline{\frac{3}{7}}$$

$$\frac{5}{12} + \frac{1}{4} = \underline{\frac{8}{12} + \frac{3}{12}}$$

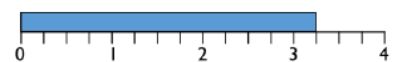
5. Complete the part-whole model.



6.

Write the mixed numbers as improper fractions.

$$3\frac{1}{4} = \frac{\boxed{13}}{4}$$



$$4\frac{2}{3} = \frac{\boxed{14}}{\boxed{3}}$$

Year 7 Core- Addition and Subtraction of Fractions Answers

<p>7. Calculate $3\frac{5}{12} + 2\frac{1}{3}$ 1 mark for correct method with one error.</p> <p style="text-align: right;"><u>$5\frac{9}{12} / 5\frac{3}{4} / \frac{23}{4}$ oe</u></p>	<p>8. Calculate $\frac{1}{4} + 0.6$</p> <p style="text-align: right;"><u>$0.85 / \frac{17}{20}$</u></p>
<p>9. Compare using $<$, $>$ or $=$</p> <p style="text-align: center;">$\frac{6}{10} \quad \bigcirc \quad 0.4 + \frac{2}{5}$</p> <p style="text-align: center;">$3 - \frac{4}{5} \quad \bigcirc \quad 2 + \frac{1}{8}$</p>	<p>10. $a = \frac{5}{6}$ and $b = \frac{2}{3}$</p> <p>Calculate</p> <p style="text-align: center;">$a - b = \frac{1}{6}$</p> <p style="text-align: center;">$a + b = \frac{9}{6} / 1\frac{1}{2}$ oe</p>
<p>11. Jay drinks $7\frac{2}{5}$ litres of water in a week. Amina drinks $5\frac{2}{3}$ litres of water in a week. How much more water does Jay drink than Amina? 1 mark for correct method with one error.</p> <p style="text-align: right;"><u>$1\frac{11}{15}$</u></p>	<p>12. Write as a single fraction.</p> <p style="text-align: center;">$\frac{2x}{5} + \frac{3x}{10}$</p> <p style="text-align: right;"><u>$\frac{7x}{10}$</u></p>

Year 7 Higher – Addition and Subtraction of Fractions Answers

<p>1. e.g.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin: 5px;">$\frac{3}{4}$</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">$\frac{30}{40}$</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">$\frac{21}{28}$</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; margin: 5px;">$\frac{33}{44}$</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">$\frac{99}{132}$</div> </div>	<p>2. Solve the equation $x + \frac{2}{3} = \frac{7}{12}$</p> $-\frac{2}{3} \quad -\frac{2}{3}$ $\frac{7}{12} - \frac{2}{3} = \frac{7}{12} - \frac{8}{12}$ <p>$x =$ $-\frac{1}{12}$</p>						
<p>3.</p> $4\frac{1}{3} + 7\frac{1}{4} + 4\frac{1}{3} + 7\frac{1}{4}$ $= 22 + \frac{4}{12} + \frac{3}{12} + \frac{4}{12} + \frac{3}{12}$ $= 22\frac{14}{12}$ $= 23\frac{2}{12}$ $= 23\frac{1}{6}$ <div style="margin-left: 150px;">$25 - 23\frac{1}{6} = 1\frac{5}{6}$</div> <p>$1\frac{5}{6}$ inches</p>	<p>4.</p> <div style="text-align: center;"> <table border="1" style="margin: auto; border-collapse: collapse;"> <tr><td style="padding: 5px;">$4\frac{3}{6}$</td></tr> <tr><td style="padding: 5px;">$3\frac{7}{12}$</td><td style="padding: 5px;">$1\frac{1}{6}$</td></tr> <tr><td style="padding: 5px;">$2\frac{3}{4}$</td><td style="padding: 5px;">$\frac{5}{6}$</td><td style="padding: 5px;">$\frac{1}{3}$</td></tr> </table> </div> $1\frac{1}{6} - \frac{1}{3} = 1\frac{1}{6} - \frac{2}{6}$ $= \frac{5}{6}$ $2\frac{3}{4} + \frac{5}{6} = 2\frac{9}{12} + \frac{10}{12}$ $= 2\frac{19}{12} = 3\frac{7}{12}$ $3\frac{7}{12} + 1\frac{1}{6} = 3\frac{7}{12} + 1\frac{2}{12} = 4\frac{9}{12}$ $= 4\frac{3}{4}$ <p><u>No</u></p>	$4\frac{3}{6}$	$3\frac{7}{12}$	$1\frac{1}{6}$	$2\frac{3}{4}$	$\frac{5}{6}$	$\frac{1}{3}$
$4\frac{3}{6}$							
$3\frac{7}{12}$	$1\frac{1}{6}$						
$2\frac{3}{4}$	$\frac{5}{6}$	$\frac{1}{3}$					
<p>5. b) $x + 3 = 5\frac{1}{3}$</p> <p>$x =$ $2\frac{1}{3}$</p>	<p>6. a) $\frac{1}{s} + \frac{3}{s^2} =$ $1\frac{1}{4}$</p>						