



Formula Word Problems

I can use simple formulae to answer algebraic word problems.



The cost of renting out a carpet cleaner is a one-off payment of £35 and then a daily hire cost of £12.



Use the formula $\text{£}35 + (\text{number of days} \times \text{£}12) = \text{rental cost}$ to calculate the cost of renting a carpet cleaner for:

- a) 3 days _____
- b) 1 week _____
- c) a fortnight _____

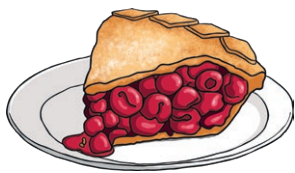
The cost of going on a pony-trekking day is £28 upfront and then £5 for every hour of horse riding.



Use the formula $\text{£}28 + (\text{number of hours} \times \text{£}5) = \text{cost}$ to calculate the cost of pony-trekking for:

- a) 4 hours _____
- b) 9 hours _____
- c) $6 \frac{1}{2}$ hours _____

The time it takes to cook a fruit pie is 35 minutes plus an additional 6 minutes for every 100g of fruit filling.



Use the formula $35 + (6 \times \text{weight in grams} \div 100) = \text{time in minutes}$ to calculate the time for cooking a pie with the following amount of fruit filling:

- a) 0.5kg _____
- b) $\frac{3}{4}$ kg _____
- c) 1.25kg _____

The cost of a taxi journey is a flat fee of £10 and then £1.50 for every mile.



Use the formula $\text{£}10 + (\text{miles} \times \text{£}1.50) = \text{cost of taxi journey}$ to calculate the cost of these journeys:


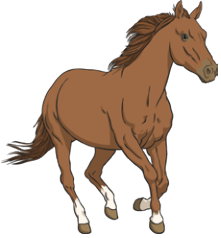
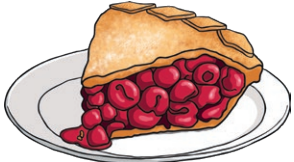
- a) 4 miles _____
- b) 7 miles _____
- c) 9.5 miles _____



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<p>The cost of renting out a carpet cleaner is a one-off payment of £35 and then a daily hire cost of £12.</p> 	<p>Use the formula $\text{£35} + (\text{number of days} \times \text{£12}) = \text{rental cost}$ to calculate the cost of renting a carpet cleaner for:</p> <p>a) 5 days _____</p> <p>b) 3 weeks _____</p> <p>c) the month of April _____</p>
<p>The cost of going on a pony-trekking day is £28 upfront and then £5.50 for every hour of horse riding.</p> 	<p>Write a formula for the cost of pony-trekking:</p> <p>_____</p> <p>Use the formula to calculate the cost of pony-trekking for:</p> <p>a) 3 hours _____</p> <p>b) 6 hours _____</p> <p>c) $7 \frac{1}{2}$ hours _____</p>
<p>The time it takes to cook a fruit pie is 35 minutes plus an additional 6 minutes for every 100g of fruit filling.</p> 	<p>Write a formula for the time needed to cook a pie:</p> <p>_____</p> <p>Use the formula to calculate the time for cooking pies with the following amount of fruit fillings:</p> <p>a) 400g _____</p> <p>b) 0.225kg _____</p> <p>c) 0.775kg _____</p>



The cost of a taxi journey is a flat fee of £10 and then £1.50 for every mile.



Write a formula for the cost of a taxi journey:

Use the formula to calculate the cost of the following journeys:

a) 6 miles _____

b) 15 miles _____



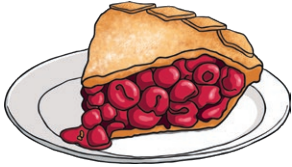

c) 20.5 miles _____



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<p>The cost of renting out a carpet cleaner is a one-off payment of £35 and then a daily hire cost of £12.</p> 	<p>Write a formula for the cost of renting a carpet cleaner:</p> <hr/> <p>I spent £335 renting a carpet cleaner. For how many days did I rent it?</p>
<p>The cost of going on a pony-trekking day is £49 upfront and then £13 for every hour of horse riding.</p> 	<p>Write a formula for the cost of pony-trekking:</p> <hr/> <p>I spent £120.50 on a pony-trekking day. For how many hours did I trek?</p>
<p>The time it takes to cook a fruit pie is 35 minutes plus an additional 6 minutes for every 100g of fruit filling.</p> 	<p>Write a formula for the time to cook a fruit pie:</p> <hr/> <p>It takes 57 and a half minutes to cook my cherry pie. How many grams of cherries did I use?</p>
<p>The cost of a taxi journey is a flat fee of £10 and then £1.50 for every mile.</p> 	<p>Write a formula for the cost of a taxi journey:</p> <hr/> <p>I take a taxi journey that costs £52. How many miles did I travel?</p>



Formula Word Problems Answers

<p>The cost of renting out a carpet cleaner is a one-off payment of £35 and then a daily hire cost of £12.</p>	<p>Use the formula $\text{£35} + (\text{number of days} \times \text{£12}) = \text{rental cost}$ to calculate the cost of renting a carpet cleaner for:</p> <p>a) 3 days £71</p> <p>b) 1 week £119</p> <p>c) a fortnight £203</p>
<p>The cost of going on a pony-trekking day is £28 upfront and then £5 for every hour of horse riding.</p>	<p>Use the formula $\text{£28} + (\text{number of hours} \times \text{£5}) = \text{cost}$ to calculate the cost of pony-trekking for:</p> <p>a) 4 hours £48</p> <p>b) 9 hours £73</p> <p>c) $6 \frac{1}{2}$ hours £60.50</p>
<p>The time it takes to cook a fruit pie is 35 minutes plus an additional 6 minutes for every 100g of fruit filling.</p>	<p>Use the formula $35 + (6 \times \text{weight in grams} \div 100) = \text{time in minutes}$ to calculate the time for cooking a pie with the following amount of fruit filling:</p> <p>a) 0.5kg 65 minutes</p> <p>b) $\frac{3}{4}$ kg 80 minutes</p> <p>c) 1.25kg 110 minutes</p>
<p>The cost of a taxi journey is a flat fee of £10 and then £1.50 for every mile.</p>	<p>Use the formula $\text{£10} + (\text{miles} \times \text{£1.50}) = \text{cost of taxi journey}$ to calculate the cost of these journeys:</p> <p>a) 4 miles £16</p> <p>b) 7 miles £20.50</p> <p>c) 9.5 miles £24.25</p>



Formula Word Problems Answers

<p>The cost of renting out a carpet cleaner is a one-off payment of £35 and then a daily hire cost of £12.</p>	<p>Use the formula $\text{£35} + (\text{number of days} \times \text{£12}) = \text{rental cost}$ to calculate the cost of renting a carpet cleaner for:</p> <p>a) 5 days £95</p> <p>b) 3 weeks £287</p> <p>c) the month of April £395</p>
<p>The cost of going on a pony-trekking day is £28 upfront and then £5.50 for every hour of horse riding.</p>	<p>Write a formula for the cost of pony-trekking:</p> $\text{£28} + (\text{number of hours} \times \text{£5.50}) = \text{cost}$ <p>Use the formula to calculate the cost of pony-trekking for:</p> <p>a) 3 hours £44.50</p> <p>b) 6 hours £61</p> <p>c) $7 \frac{1}{2}$ hours £69.25</p>
<p>The time it takes to cook a fruit pie is 35 minutes plus an additional 6 minutes for every 100g of fruit filling.</p>	<p>Write a formula for the time needed to cook a pie:</p> $35 + (6 \times \text{weight in grams} \div 100) = \text{time in minutes}$ <p>Use the formula to calculate the time for cooking pies with the following amount of fruit fillings:</p> <p>aa) 400g 59 minutes</p> <p>b) 0.225kg 48 minutes 30 seconds</p> <p>c) 0.775kg 81 minutes 30 seconds</p>
<p>The cost of a taxi journey is a flat fee of £10 and then £1.50 for every mile.</p>	<p>Write a formula for the cost of a taxi journey:</p> $\text{£10} + (\text{number of miles} \times \text{£1.50}) = \text{cost of taxi journey}$ <p>Use the formula to calculate the cost of the following journeys:</p> <p>a) 6 miles £19</p> <p>b) 15 miles £32.50</p> <p>c) 20.5 miles £40.75</p>



Formula Word Problems **Answers**

<p>The cost of renting out a carpet cleaner is a one-off payment of £35 and then a daily hire cost of £12.</p>	<p>Write a formula for the cost of renting a carpet cleaner:</p> $\pounds 35 + (\text{number of days} \times \pounds 12) = \text{rental cost}$ <p>I spent £335 renting a carpet cleaner. For how many days did I rent it?</p> <p>25 days</p>
<p>The cost of going on a pony-trekking day is £49 upfront and then £13 for every hour of horse riding.</p>	<p>Write a formula for the cost of pony-trekking:</p> $\pounds 49 + (\text{number of hours} \times \pounds 13) = \text{cost}$ <p>I spent £120.50 on a pony-trekking day. For how many hours did I trek?</p> <p>5.5 hours</p>
<p>The time it takes to cook a fruit pie is 35 minutes plus an additional 6 minutes for every 100g of fruit filling.</p>	<p>Write a formula for the time to cook a fruit pie:</p> $35 + (6 \times \text{weight in grams} \div 100) = \text{time in minutes}$ <p>It takes 57 and a half minutes to cook my cherry pie. How many grams of cherries did I use?</p> <p>375 grams</p>
<p>The cost of a taxi journey is a flat fee of £10 and then £1.50 for every mile.</p>	<p>Write a formula for the cost of a taxi journey:</p> $\pounds 10 + (\text{miles} \times \pounds 1.50) = \text{cost of taxi journey}$ <p>I take a taxi journey that costs £52. How many miles did I travel?</p> <p>28 miles</p>