Foundation Check In - 1.04 Inverse operations

Fill in the missing values.

1. 
2. 
3. 
4. 
5. Find the reciprocal of 0.8.
6. Jai thinks of a number. He multiplies it by 6 and finds the square root of the answer. Explain how you would find the number Jai thought of.
7. Given that , show that .
8. Asher says that if  then . What mistake has Asher made?
9. A triangle has an area of 96 cm2 and a height of 8 cm. How long is the base of the triangle?
10. Material costs £12.50 per square metre. Asif pays £75 for a piece of material 1.5 m wide. How long is the piece of material Asif buys?

**Extension**



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These are also arithmagons.

Can you work out what numbers could go in the blank circles?

Can you find different solutions?

Make some of your own arithmagons.

This is an arithmagon.

The numbers in the square boxes are made by adding the numbers in the circles on either side.

Answers

1. 
2. 18
3. 36
4. -3
5. 1.25
6. You would square the answer and then divide by 6
7. , 
8. Asher has doubled *x* instead of squaring it
9. Area , so base cm
10. m long

**Extension**

 E.g.



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| **Assessment Objective** | **Qu.** | **Topic** | **R** | **A** | **G** |  | **Assessment Objective** | **Qu.** | **Topic** | **R** | **A** | **G** |
| AO1 | 1 | Solve single step equation by finding square root |  |  |  |  | AO1 | 1 | Solve single step equation by finding square root |  |  |  |
| AO1 | 2 | Solve two step equation using inverse operations |  |  |  |  | AO1 | 2 | Solve two step equation using inverse operations |  |  |  |
| AO1 | 3 | Use inverse operations involving negative numbers |  |  |  |  | AO1 | 3 | Use inverse operations involving negative numbers |  |  |  |
| AO1 | 4 | Use two step inverse operations involving negative numbers |  |  |  |  | AO1 | 4 | Use two step inverse operations involving negative numbers |  |  |  |
| AO1 | 5 | Find a reciprocal |  |  |  |  | AO1 | 5 | Find a reciprocal |  |  |  |
| AO2 | 6 | Communicate solution involving inverse operations |  |  |  |  | AO2 | 6 | Communicate solution involving inverse operations |  |  |  |
| AO2 | 7 | Reason using inverse operations to achieve a given result |  |  |  |  | AO2 | 7 | Reason using inverse operations to achieve a given result |  |  |  |
| AO2 | 8 | Assess validity of statement involving inverse operations |  |  |  |  | AO2 | 8 | Assess validity of statement involving inverse operations |  |  |  |
| AO3 | 9 | Solve geometric problem using inverse operations |  |  |  |  | AO3 | 9 | Solve geometric problem using inverse operations |  |  |  |
| AO3 | 10 | Solve a problem in context using inverse operations |  |  |  |  | AO3 | 10 | Solve a problem in context using inverse operations |  |  |  |
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