**Year 7 Maths (Distributive Law)**

**Part One**

1. Find the total area of the shape below:

*1cm*

*1cm*

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1. Find the total area of the shape below:

*6m*

*3m*

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1. Find the area of the shape below:

2

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**Part Two**

Evaluate the following expression

Evaluate this expression

What do you notice about the result? Explain why the results are the same.

**Part Three**

Joe is an architect and designs a classroom as shown below:

*metres*

4 metres

1. What is the total area of the classroom?

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Joe decides to add an extension to the classroom as shown below:

4 *metres*

*metres*

*metres*

1. What is the length of the “longer” side of the classroom?

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1. What is the area of the extension?

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1. What is the total area of the new classroom?

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Joe’s manager says that the must be 6 metres. What is the total area of the classroom? *Including the extension.*

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**Part Four**

Joe thinks that square rooms are better for student learning so designs another classroom as shown below:

metres

metres

1. What is the total area of the classroom?

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Again, Joe decides to add an extension to the classroom as shown below:

1. What is the length of the “longer side of the classroom”?

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1. What is the area of the extension?

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1. What is the total area of the new classroom?

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**Part Five**

Expand the following expression

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|  |  |

**Part Six**

Consider whether the following equations are true or false by circling T or F.

***Hint:*** Use numbers in place of pronumerals to see if it is True or False.

|  |  |  |
| --- | --- | --- |
|  | T | F |
|  | T | F |
|  | T | F |
|  | T | F |