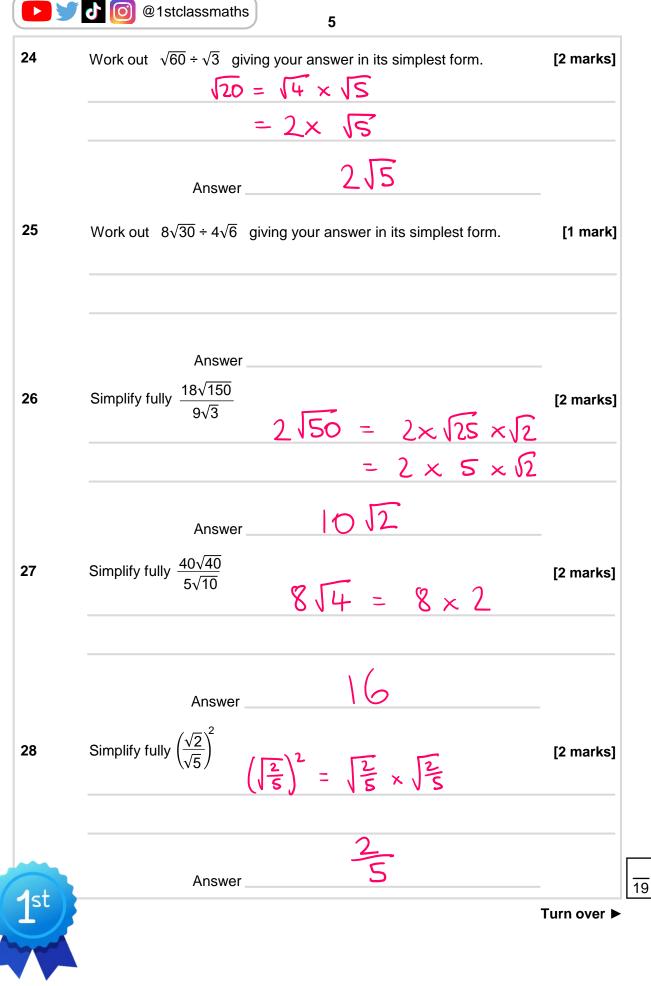
		g with Surds	
SCAN M	REVISE THIS TOPIC		
1	Express $\sqrt{12}$ in its simplest form.	$\sqrt{12} = \sqrt{4} \times \sqrt{3}$	[1 mark]
	Answer	25	
2	Express $\sqrt{50}$ in its simplest form.	$\sqrt{50} = \sqrt{25} \times \sqrt{2}$	[1 mark]
	Answer	512	
3	Express $\sqrt{500}$ in its simplest form.	√500 = √100 × √5	[1 mark]
	Answer	1015	
4	Express $\sqrt{27}$ in its simplest form.	$\sqrt{27} = \sqrt{9} \times \sqrt{3}$	[1 mark]
	Answer	313	
5	Express $\sqrt{98}$ in its simplest form.	198 = 149 x 12	[1 mark]
	Answer	752	
6	Express $\sqrt{48}$ in its simplest form.	$\sqrt{48} = \sqrt{16} \times \sqrt{3}$	[1 mark]
1 st	Answer	413	

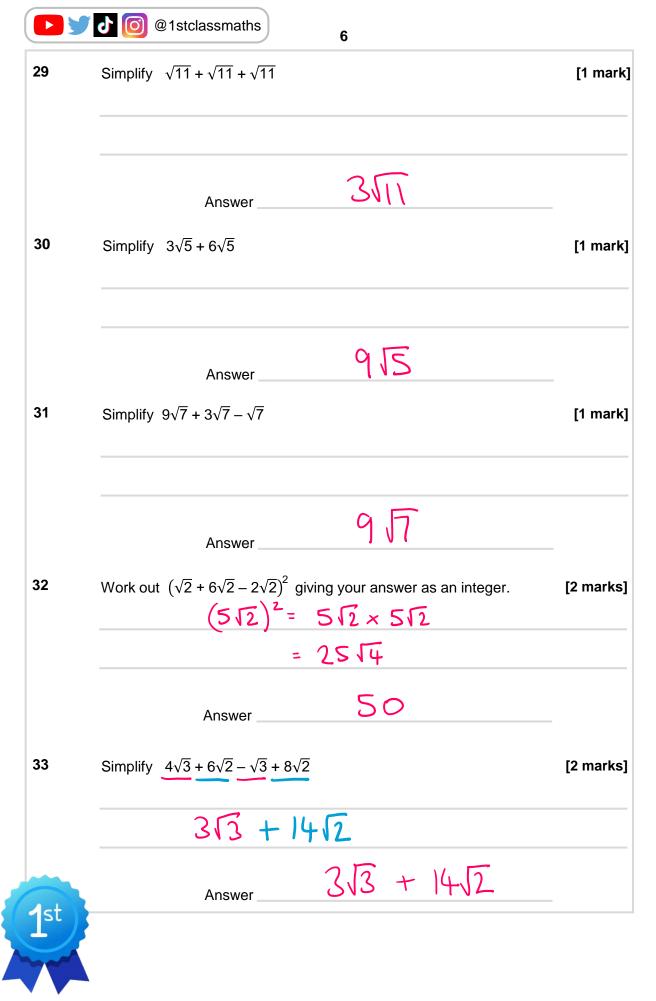
	0 @1stclassmaths	2	
7	Express $5\sqrt{8}$ in its simplest form.	5 × 14 × 12 5 × 2 × 12	[1 mark]
	Answer	1012	
8	Express $4\sqrt{18}$ in its simplest form.	4×19×12 =4×3×12	[1 mark]
	Answer	1212	
9	Express $2\sqrt{200}$ in its simplest form	2×100×12 = 2×10×12	[1 mark]
	Answer	2052	
10	Express $9\sqrt{20}$ in its simplest form.	9×√4 ×√5 = 9 × 2 ×√5	[1 mark]
	Answer	185	
11	Express $7\sqrt{640}$ in its simplest form	7 x 164 x 110 = 7 x 8 × 110	[1 mark]
	Answer	56110	
12	Express $5\sqrt{80}$ in its simplest form.	5×116×15 5×4×15	[1 mark]
	Answer	2015	
13	Express $3\sqrt{72}$ in its simplest form.	3 x 136 x 12 3 x 6 x 12	[1 mark]
	Answer	18/2	
1 st	Answer	(8)2	

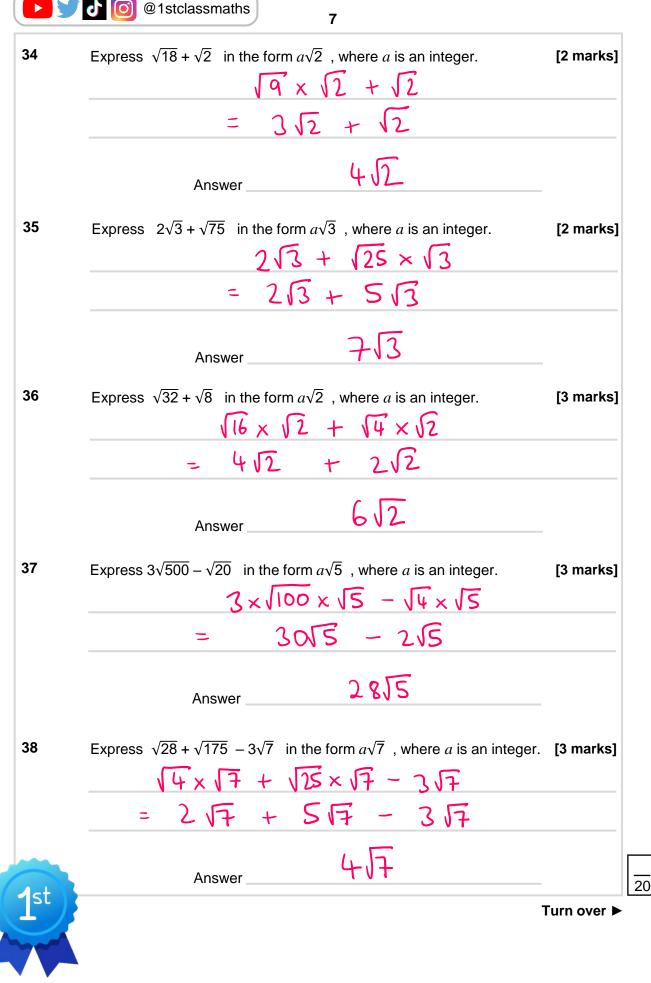
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	Work out $\sqrt{6} \times \sqrt{3}$ giving your answer in its simplest form. $\sqrt{18} = \sqrt{9} \times \sqrt{2}$	[2 marks]
	$= 3 \times \sqrt{2}$	
	Answer 3/2	
;	Work out $\sqrt{10} \times \sqrt{6}$ giving your answer in its simplest form. $\sqrt{60} = \sqrt{4} \times \sqrt{15}$	[2 marks]
	$= 2 \times \sqrt{15}$	
	Answer 2/15	
i	Work out $2\sqrt{5} \times 5\sqrt{8}$ giving your answer in its simplest form. $ 0\sqrt{40} = 0 \times \sqrt{4} \times \sqrt{4}$	
	= 10 x 2 x	10
	Answer 20 JIO	
	Work out $4\sqrt{2} \times 2\sqrt{12}$ giving your answer in its simplest form. $\sqrt[8]{\sqrt{24}} = \sqrt[8]{\times\sqrt{4}} \times \sqrt{6}$	[2 marks]
	= 8×2×16	
	Answer 1676	
	Work out $2\sqrt{20} \times 3\sqrt{5}$ giving your answer as an integer. $6\sqrt{100} = 6 \times 10$	[2 marks]
	Answer 60	
st		Turn over ▶

	Image: Orginal state Image: Orginal state	
19	Work out $(\sqrt{6})^2$ giving your answer as an integer. $\sqrt{6} \times \sqrt{6} = \sqrt{36}$	[2 marks]
	Answer6	
20	Work out $(\sqrt{5})^4$ giving your answer as an integer. $\sqrt{5} \times \sqrt{5} \times \sqrt{5} \times \sqrt{5}$	[2 marks]
	= 5 × 5	
	Answer 25	1
21	Work out $(2\sqrt{3})^3$ giving your answer in its simplest form. $2\sqrt{3} \times 2\sqrt{3} \times 2\sqrt{3} = 8\sqrt{27}$	[2 marks]
	= 8×19 = 8×3	× (3 × (3
	Answer 245	
22	Work out $(\sqrt{2} \times \sqrt{3} \times \sqrt{5})^2$ giving your answer as an integer. $(\sqrt{30})^2 = \sqrt{30} \times \sqrt{30}$	[2 marks]
	Answer 30	
23	Express $(\sqrt{3})^7$ in the form $a\sqrt{3}$, where <i>a</i> is an integer. $\sqrt{3} \times \sqrt{3} \times \sqrt{3}$	[2 marks]
	$= 3 \times 3 \times 3 \times \sqrt{3}$	
1st	Answer 27,5	
F		







▶ 🔰 🚺 👩 @1stclassmaths 7 39 Ross is doing a surds question. Ross writes: $\sqrt{300} + \sqrt{12}$ $\sqrt{300} + \sqrt{12} = \sqrt{312}$ = 100 × 13 + 14 × 13 $=\sqrt{4} \times \sqrt{78}$ $= 10\sqrt{3} + 2\sqrt{3}$ $= 2 \times \sqrt{78}$ $= 2\sqrt{78}$ = 123 [1 mark] Explain the mistake that Ross has made You cannot add 500 and JIZ as they do not have the same number inside the root. Ross should simplify them first. Work out $\frac{\sqrt{30} \times 5\sqrt{6}}{\sqrt{125} - \sqrt{20}}$ giving your answer as an integer. 40 [4 marks] 5 180 J25 x 15 - 14 x 15 5 x 136 × 15 515 - 215 $5 \times 6 \times \sqrt{5}$ -315 = \bigcirc Answer **1**st

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