Name:				Date:
1) \$5000 : \$12500 :	\$7500	2) 71 cars	3) \$22400 : \$112	00 : \$16800 : \$33600
1) 91.3 : 7.7 : 1.0	5) 5.14cm	6) 105km	7) violin: 24 ppl, clarinet: 27 ppl	
3) 16 trees	9) 100km/h	10) 4 problems	11) 9:16	12) 16.875 min
13) \$120	14) 23.5 feet	15) 391872 inches	16) 32 times	17) 48 hours
18) 85%	19) 18:17	20) 2.4 inches		
1. Three peop the prize be		a lottery ticket, in the rat	io 2: 5: 3. If the ticl	ket wins \$25,000, ho
	f Japanese cars to Ger ars are there?	rman cars in a parking lot	is 9:5. If the lot cor	ntains 252 cars, how r
Japanese ca	ars are there?	ed to share the profits in t		

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5.	The scale on a map of Saskatchewan is 1 cm represents 50 km. The actual straight line distance between Regina and Saskatoon is about 257 km. What is the map distance between these 2 cities?
6.	The scale on a map of British Columbia is 1:5 000 000. This means that 1 cm on the map represents 5 000 000 cm actual distance. The map distance between Kelowna and Salmon Arm is 2.1 cm. What is the actual distance in kilometres between these towns?
7.	Fourty-five students take piano lessons. The ratio of the number of students who take piano lessons to violin lessons is 15:8. The ratio of the number of students who take violin lessons to clarinet lessons is 8:9. How many students take violin and clarinet lessons respectively?
8.	Bill and Mary are planting trees for the town. On the first day, they planted 38 trees. Bill didn't work on the second day, but Mary planted the same number she had the first day. They had now planted 60 trees. How many trees were planted by Bill? Set up an equation to solve this problem.
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9.	Two towns are 80 km apart. Sylvia wants to drive from one town to the other in exactly one hour. For the first 30 minutes she drives at a rate of 60 km/h. At what constant rate must she drive for the next 30 minutes if she is to accomplish her goal?
10.	Before beginning an exam, Gerry calculated that, if she were to spend 10 minutes solving each of the 12 problems, then she would be able to complete the exam in 2 hours. During the exam, Gerry found some problems difficult. They each took her twice as long as she had calculated. She found the remaining problems easy. They took only half as long as she calculated. She completed the 12 problems in exactly 2 hours. How many problems did Gerry find to be difficult?
11.	A cask is filled with 45 gallons of wine. Nine gallons are removed, and the cask is refilled with water. Then nine gallons of the mixture are removed and the cask is refilled with water again. What is the ratio of water to wine in the final mixture?
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1	.2. Al and Bert must arrive at a town 22.5 km away. They have one bicycle between them and must arrive at the same time. Bert sets out riding at 8km/h, leaves the bicycle and then walks at 5 km/h. Al walks at 4 km/h, reaches the bicycle and rides at 10 km/h. For how many minutes was the bicycle not in motion?
1	3. A professional lawn mower charges \$40 per hour. It takes Mike, the professional lawn mower, 45 minutes to mow an area of 10 m by 30 m. How much will it cost to hire him to mow a rectangular area of 20 m by 60 m?
1	4. A rubber ball is known to rebound to 1/2 the height that is drops. The ball is dropped from a height of 8 feet. Assuming that it bounces straight up and down, how many feet will it have traveled by the time it hits the ground the 6th time? Give your answer is a common fraction in lowest terms.
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15	. A circular ceiling fan rotates at a constant speed of 80 revolutions per minute. A point halfway between the	
13.	center of the fan and the outer edge of the fan travels 97,968 inches in 15 minutes. How far does a point on the outer edge of the fan travel in 30 minutes?	
16.	. Alex and Becky are racing in a peculiar manner. They both begin at the same spot on a 1 km circular track and move in opposite directions. Alex runs at 4 m/s and Becky runs at 5 m/s. How many times would they have passed each other if the race stops after 1 hour?	
17.	. If it takes Jeremy 18 hours to dig a 2 m by 2 m by 2 m hole, how many hours would it take three men (each working at the same rate as Jeremy) to dig a 4 m by 4 m by 4 m hole?	
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10)		A lawaa baaa fill		12 hours With the re-	-1
16	empty, the owner	swimming pool in 16 ho turns on the smaller hos 10 AM to 3:00 PM. Roun	e at 8:00 AM. He tu	rns on the larger h	ose at 10:00 AM. Both	
19	mixture of orange	al volume contain orang juice to water with a rate of 3:4. If the two bottles	tio of 3:2. The seco	nd bottle contains a	a mixture of orange ju	ice to
	water with a ratio	or 3.4. If the two bottles	s are put together, v	vitat is the ratio of	orange juice to water:	
20). Two triangles shar	e a common side. The s	ide of one triangle a	re in the ratio 8 · 9	· 15 and the sides of t	he
20	other triangle are i	n the ratio 7 : 10 : 12. A sible length of the comm	ssuming that all of t			
	(a) 18	(b) 24	(c) 30	(d)	36 (e)	56
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- 21. A wire is cut into two parts in the ratio 3:2. Each part is bent to form a square. What is the ratio of the area of the larger square ot the area of the smaller square?
 - (A) 3:2

- (B) 9:4 (C) 5:3 (D) 5:2 (E) 12:5

22. In older TVs, the ratio of screen width to screen height is 4:3. In newer flat-screen TVs, the ratio of screen width to screen height is 16:9. Both pictures below show a 32-inch 4:3 screen TV. (Here 32 inches means that the diagonal measure 32inches) A newer TV show has been shot for 16:9 TVs. When it is viewed on a 4:3 TV, equal grey bands are produced at the top and bottom, so that the rest of the picture is in the correct 16:9 ratio. What is the vertical height in inches of one of these grey bands? Express the answer as a decimal, to the nearest tenth of an inch.



