83 **Which fraction equals the product $\left(\frac{x+5}{3x+2}\right)\left(\frac{2x-3}{x-5}\right)$?**

A $\frac{2x-3}{3x+2}$

B $\frac{3x+2}{4x-3}$

C $\frac{x^2-25}{6x^2-5x-6}$

D $\frac{2x^2+7x-15}{3x^2-13x-10}$

CSA10029

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84 $\frac{x^2+8x+16}{x+3} \div \frac{2x+8}{x^2-9} =$

A $\frac{2(x+4)^2}{(x-3)(x+3)^2}$

B $\frac{2(x+3)(x-3)}{x+4}$

C $\frac{(x+4)(x-3)}{2}$

D $\frac{(x+4)(x-3)^2}{2(x+3)}$

CSA20164

85 **Which fraction is equivalent to $\frac{\frac{3x}{5}}{\frac{x}{4}+\frac{x}{2}}$?**

A $\frac{x^2}{5}$

B $\frac{9x^2}{20}$

C $\frac{4}{5}$

D $\frac{9}{5}$

CSA10141

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86 **A pharmacist mixed some 10%-saline solution with some 15%-saline solution to obtain 100 mL of a 12%-saline solution. How much of the 10%-saline solution did the pharmacist use in the mixture?**

A 60 mL

B 45 mL

C 40 mL

D 25 mL

CSA00333

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87 **Andy's average driving speed for a 4-hour trip was 45 miles per hour. During the first 3 hours he drove 40 miles per hour. What was his average speed for the last hour of his trip?**

A 50 miles per hour

B 60 miles per hour

C 65 miles per hour

D 70 miles per hour

CSA00576

88 One pipe can fill a tank in 20 minutes, while another takes 30 minutes to fill the same tank. How long would it take the two pipes together to fill the tank?

A 50 min

B 25 min

C 15 min

D 12 min

CSA00161

---

89 Two airplanes left the same airport traveling in opposite directions. If one airplane averages 400 miles per hour and the other airplane averages 250 miles per hour, in how many hours will the distance between the two planes be 1625 miles?

A 2.5

B 4

C 5

D 10.8

CSA10055

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90 Lisa will make punch that is 25% fruit juice by adding pure fruit juice to a 2-liter mixture that is 10% pure fruit juice. How many liters of pure fruit juice does she need to add?

A 0.4 liter

B 0.5 liter

C 2 liters

D 8 liters

CSA10186

91

Jena's Vacation

Miles Traveled	600	450	300	960
Gallons of Gasoline	20	15	10	x

Jena's car averaged 30 miles per gallon of gasoline on her trip. What is the value of x in gallons of gasoline?

A 32

B 41

C 55

D 80

CSA10064

---

92 Which relation is a function?

A $\{(-1, 3), (-2, 6), (0, 0), (-2, -2)\}$

B $\{(-2, -2), (0, 0), (1, 1), (2, 2)\}$

C $\{(4, 0), (4, 1), (4, 2), (4, 3)\}$

D $\{(7, 4), (8, 8), (10, 8), (10, 10)\}$

CSA10070

93 Which relation is a function?

A

Input	Output
1	2
2	2
3	3
4	3

B

Input	Output
2	6
2	5
6	4
6	3

C

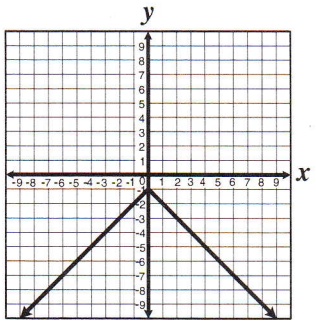
Input	Output
1	2
2	4
4	6
4	8

D

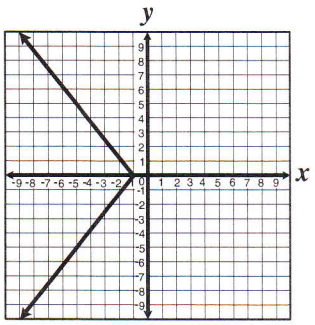
Input	Output
0	1
0	2
1	3
1	4

CSA10071

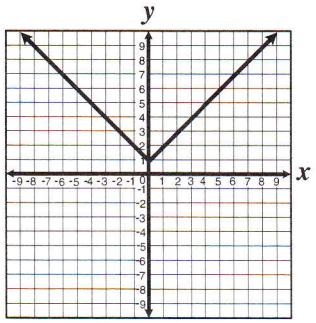
94 For which equation graphed below are *all* the *y*-values negative?



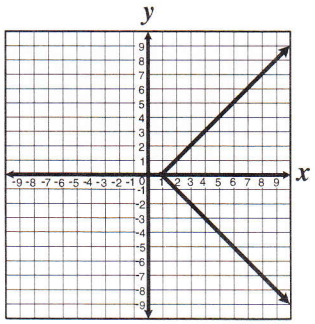
A



C



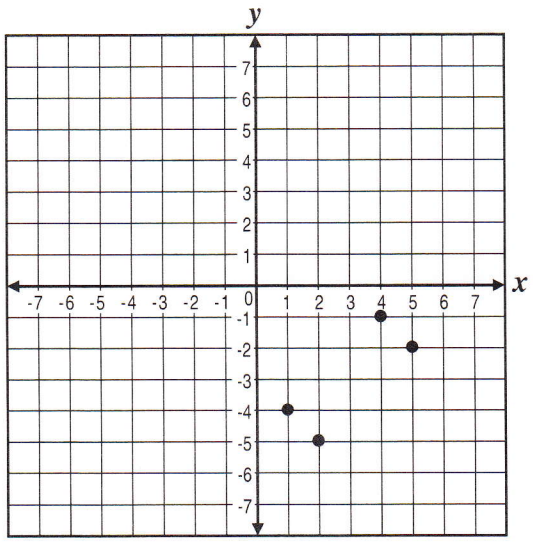
B



D

CSA00522

95 What is the domain of the function shown on the graph below?



A $\{-1, -2, -3, -4\}$

B $\{-1, -2, -4, -5\}$

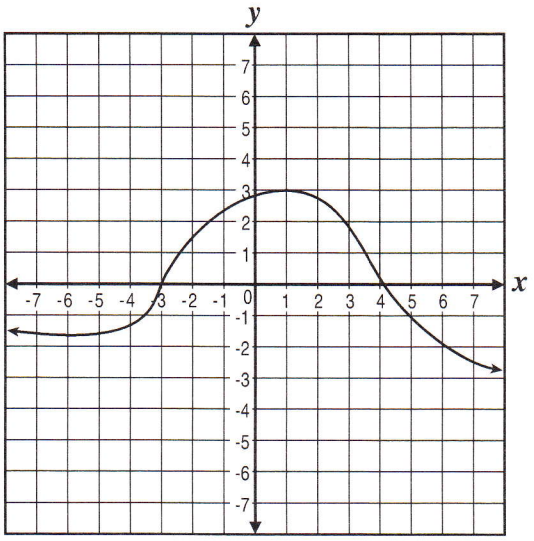
C $\{1, 2, 3, 4\}$

D $\{1, 2, 4, 5\}$

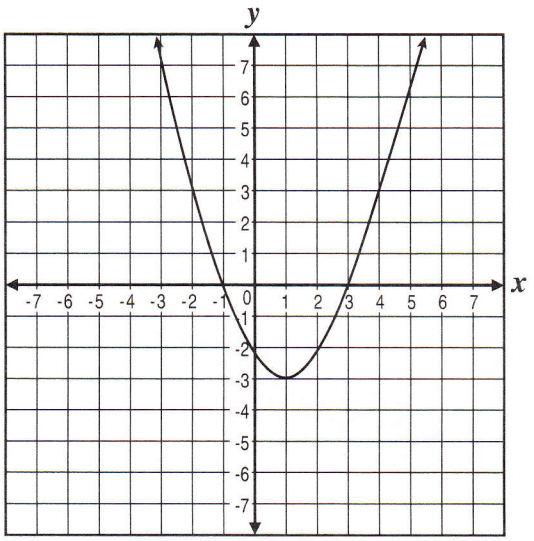
CSA10072

96 Which of the following graphs represents a relation that is *not* a function of x?

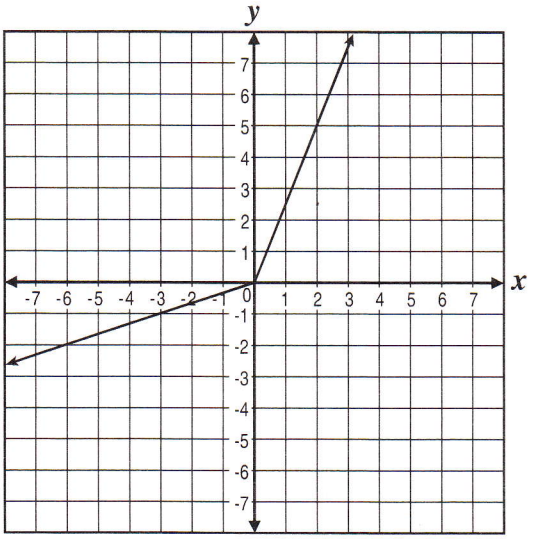
A



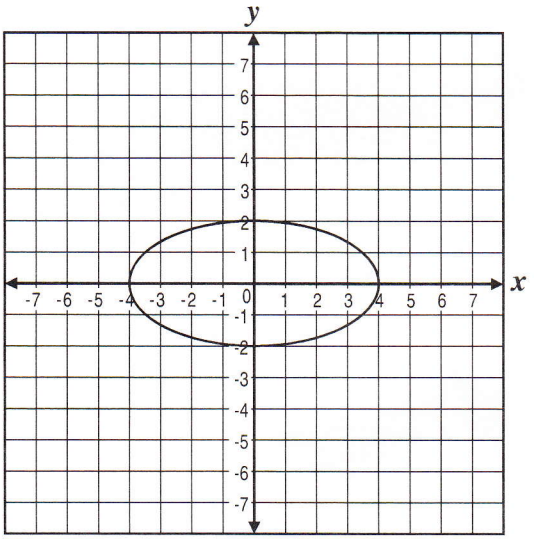
C



B



D



CSA30002