

D

#7

$$3 \text{ lbs} \times 7 \text{ days} = 21 \text{ lbs per week}$$

$$\times 3$$

$$63 \text{ lbs}$$

SHSAT #7

B

#8

Sm	med	lg
	5	3
3	2	
↓	↓	↓
15	10	6

times 2
times 5

B

#9

A	B	P
1A		2P

$$5A + 6B = 8B + 9P$$

$$10P + 6B = 8B + 9P$$

$$-6B \quad -6B$$

$$10P = 2B + 9P$$

$$P = 2B$$

E

#10

$$\frac{1}{5}P + \frac{4}{5}\left(\frac{3}{16}P\right) + R = 80 \text{ total}$$

$$\left(\frac{16}{80}\right)P + \frac{12}{80}P + R = 80 \text{ total}$$

$$16 + 12 + R = 80$$

$$28 + R = 80$$

$$52 = R$$

C

#11

A	P	O
3	5	
	3	7
9	LCM 15	35
18	30	70

Times 3

Times 5

Times 2

SHSAT #7

A

#12

single	double	super	total
7	5	2	14
28	20	8	56

Times 4

B

#13

1 cup = 8oz.
 1 pint = 2 cups = 16oz
 1 quart = 2 pints = 32oz
 1 gallon = 4 qts. = 128oz
 x3
384oz

D

#14

$42\% - 17\% = 25\%$ equals $\frac{1}{4}$ of 20000 = 5000 Voters

B #15

Blip	Dinos	Grangs
5	4 3	2
15	12	8
$\frac{15}{8}$	$\frac{12}{8}$	$\frac{8}{8}$
$1\frac{7}{8}$	$1\frac{1}{2}$	1

Times 3
Times 4
Dose 8

B #16

$$(3.98) - (1.75 + 0.3 + 0.10)$$

$$3.98 - 2.15 = \boxed{\$1.83} \text{ remains.}$$

$$23 - (7 + 3 + 2) = \boxed{11} \text{ coins remains}$$

D #17

$$T = 38 \quad C = 58 \quad \boxed{C = 100}$$

$$100 = 58$$

$$T = 3(20) \leftarrow \boxed{20 = 8} \leftarrow$$

$$\boxed{T = 60}$$

C #18

$$\$95 - 20\% 95 = 95 - 19 = \$76 \text{ each}$$

$$\begin{array}{r} \times 7 \\ 532 \end{array}$$

B

#19

A	B	C
6	5	
	5	8
→ 6	5	8

$$6:8 = 3:4$$

SHSAT #7

D

#20

$$4'10'' = 58'' \div \left(\frac{3\frac{1}{2}}{8}\right) = \frac{58}{1} \times \frac{8}{29} = 2 \times 8 = 16 \text{ layers.}$$

$$50 \times 16 = 100 \times 8 = 800$$

E

#21

$$X: \frac{3.24}{7.24} > \frac{11.7}{24.7}$$

$$Y: \frac{2.22}{5.22} < \frac{9.5}{22.5}$$

$$\frac{72}{7.24} > \frac{17}{7.24} \quad \text{False}$$

$$\frac{44}{110} < \frac{45}{110} \quad \text{True}$$

$$Z: (0.1)^2 > 0.1$$

$$0.01 > 0.1 \quad \text{False}$$

B

#22

$$500 \times 0.5\% = (500) \left(\frac{0.5}{100}\right) = (500) \left(\frac{1}{200}\right) = 2.5 \text{ per box}$$

$$2.5 \times 2 = 5 \text{ per thousand.}$$

$$5 \times 10 = 50 \text{ per 10,000}$$

D

#23

Allen + Betty = Total

SHSAT #7

$$2(\$7h) + 8h = 330$$

$$14h + 8h = 330$$

$$22h = 330 \rightarrow 2h = 30$$

$$h = 15$$

Allen	Betty
$14(15) = \$210$	$8(15) = \$120$

#24

A is true.

$$5(2) = 10 \text{ (even)}$$

$$5(4) = 20 \text{ (even)}$$

$$5(6) = 30 \text{ (even)}$$

$$5(3) = 15 \text{ (odd)}$$

$$5(5) = 25 \text{ (odd)}$$

$$5(7) = 35 \text{ (odd)}$$

A

#25

$$(27-18) \div 3 + 14 + 11$$

$$9 \div 3 + 14 + 11 =$$

28

28

SHSAT 7

#26 $y=30$ $x=90$ $y=3z$
 $10=z$
 $(x+y+z) = 90 + 30 + 10 = 130$

#27 Cross multiply
 $\frac{k^2}{70} = \frac{7}{10} \rightarrow 10k^2 = 490$
 $k^2 = 49 \rightarrow k=7$

#28

Boy	Girl	total	
$2x$	$3x$	$5x$	Times (17)
34	51	85	

#29 $5(3.70) + 3(2.50) = 18.50 + 7.50 = \26 for 8 pounds
 $= \$3.25$ per lb.

#30 $\frac{160 + 260 \text{ miles}}{3 + 4 \text{ hours}} = \frac{420}{7} = 60 \text{ mph.}$