[redacted]

1-29-22 English E23 2021 December + Math 2015 Prepping for ACT

Math

43, 42, 45, 44, 4F, 46, 51

51) $5:2 \quad 3:2$

$15:6 \quad 6:4$

$5:2 \quad 3:2$

$\times 3/2$

$7.5 : 3 : 3 : 2$

45) $a\begin{bmatrix} 2 & 6 \\ (& 4 \end{bmatrix} = \begin{bmatrix} x & 27 \\ y & 2 \end{bmatrix}$

$a = 4.5$

$x + 2 = 4.5(2+4)$

57)

58) K

48) Use calculator → decimal, then check logical answer choices

Check G $\frac{4\sqrt{3}+2\sqrt{2}}{\sqrt{6}}$ and if not that, K $\frac{8}{\sqrt{6}}$

$\frac{4}{2} + \frac{2}{3} = \frac{?}{6}$ (answer choice may be simplified)

42) K

43) P: $\frac{\frac{1}{2}arq+a}{12q}$ vs. $\frac{\frac{1}{2}2arq+2a}{12q} = \frac{2\left(\frac{1}{2}arq+a\right)}{12q} = 2P$

t^2 is the time to do a task

If t increases by factor of 10, how much longer does it take to do the task?

$(10t)^2 = 100t^2$

$100t^2$ vs t^2

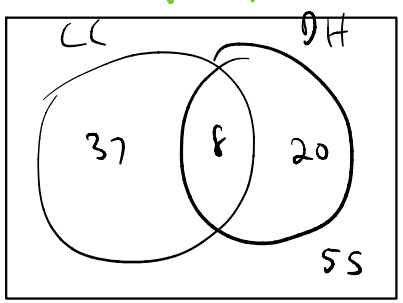
If t increases by factor of 100, how much longer does it take to do the task?

10000x longer

$n \log(n)$ better than n^2

Good sorting algorithms on good inputs usually $n \log(n)$

55)



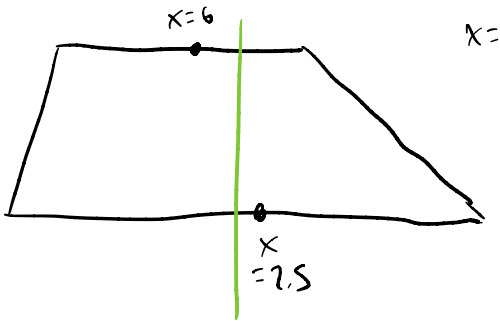
$45 + 28 = 73$

$73 - 8 = 65$

inclusion-exclusion principle

useful in probability

41)



x=6.5