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Home work #6
SE-441

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a. $150 \times 24 = \underline{\underline{3,600}}$ server hours per day.

b. $250 \times 24 = \underline{\underline{6,000}}$ server hours per day we must provision.

c. $(6000 \times 5.00 \times 365) - (3600 \times 4.20 \times 365)$
 $10,950,000 - 5,518,800 = \underline{\underline{5,431,200}}$

2a. $250 \text{ gb} \times 2 \text{ gb/hour} / 8 = \underline{\underline{62.5}}$ hours

b. $62.5 \times 4.20 = \underline{\underline{\$281.25}}$ weekly or $\$14,625$ annually

c. $250 \text{ gb} \times 2 \text{ hours per GB} = \underline{\underline{500}}$ instances

d. $500 \times 0.075 = \$37.50$

e. $250 \text{ gb} \times 0.10 = \25

f. $250 \text{ gb} \times 1000 \text{ mb} \times 8 \text{ bits} / 20 = 100,000 \text{ seconds or } 27.7 \text{ hours}$

g. $\$37.5 \text{ compute time cost} + 25 \text{ transfer cost} = \underline{\underline{\$62.50}}$

h. The company should move this process to a cloud provider. it would take roughly 62.5 hrs to process a week's worth of data locally.

to process the data locally it's way more than cloud:
 $\$281.25$ locally compared to $\$37.5$ in cloud. even with

factoring in $\$62.50$ to transfer to cloud it would still be cheaper to do it in the cloud. $\$281.25$ locally to 100.00 cloud.