S 90 Nr. 6 $P(t)$ = Wartende Personen ; t = min vor Spielbeginn

$P(90) = \left(100 \frac{P}{min} \cdot 40 min\right) \cdot \frac{1}{2} = 2000$ Personen warten

$P(70) = P(90) + \left(150 \frac{P}{min} \cdot 20 min\right) - \left(200 \frac{P}{min} \cdot 20 min\right) =$

$P(70) = 2000 P + 3000 P - 4000 P = 1000 P$ warten

$P(60) = P(70) + 225 \frac{P}{min} \cdot 10 min - 200 \frac{P}{min} \cdot 10 min =$

$P(60) = 1000 P + 2250 P - 2000 P = 1250 P$ warten

$P(40) = P(60) + 250 \frac{P}{min} \cdot 20 min - 200 \frac{P}{min} \cdot 20 min =$

$P(40) = 1250 P + 5000 P - 4000 P = 2250 P$ warten

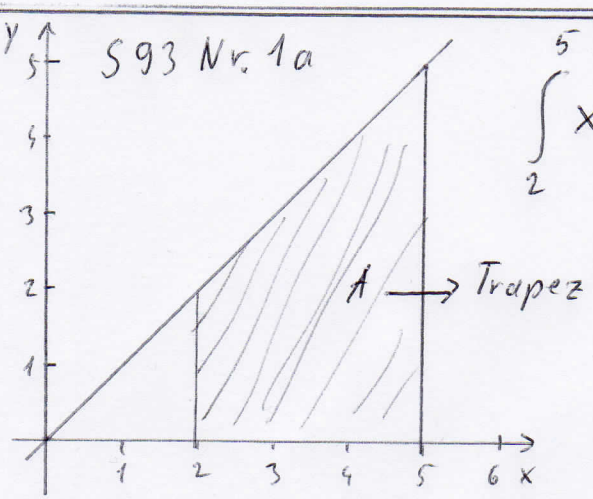
$P(30) = P(40) + 225 \frac{P}{min} \cdot 10 min - 200 \frac{P}{min} \cdot 10 min =$

$= 2250 P + 2250 P - 2000 P = 2500 P$ warten

$P(0) = P(30) + 125 \frac{P}{min} \cdot 30 min - 200 \frac{P}{min} \cdot 30 min =$

$P(0) = 2500 P + 3750 P - 6000 P = 250 P$ warten

S 93 Nr. 1a



$$\int_2^5 x \, dx = \underbrace{3 \cdot \frac{2+5}{2}}_{A \text{ Trapez}} = 3 \cdot 3{,}5 = 10{,}5$$